



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 80 and 1090

[EPA-HQ-OAR-2021-0324; FRL-8521-02-OAR]

RIN 2060-AV11

Renewable Fuel Standard (RFS) Program: RFS Annual Rules

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Under section 211 of the Clean Air Act, the Environmental Protection Agency (EPA) is required to set standards every year to implement nationally applicable renewable fuel volume targets. This action proposes to modify the 2021 and 2022 statutory volume targets for cellulosic biofuel, advanced biofuel, and total renewable fuel, as well as to establish the 2022 volume target for biomass-based diesel. This action also proposes to modify the previously established cellulosic biofuel, advanced biofuel, and total renewable fuel volume requirements for 2020. In addition, this action proposes the 2020, 2021, and 2022 renewable fuel standards for all four of the above biofuel categories. Finally, this action also proposes to address the remand of the 2016 standard-setting rulemaking, as well as several regulatory changes to the Renewable Fuel Standard (RFS) program including regulations for the use of biointermediates to produce qualifying renewable fuel, flexibilities for regulated parties, and clarifications of existing regulations.

DATES: *Comments.* Comments must be received on or before February 4, 2022.

Public hearing. EPA announced information regarding the public hearing for this proposal in a *Federal Register* document published on December 10, 2021, at 86 FR 70426.

ADDRESSES: *Comments.* You may send your comments, identified by Docket ID No. EPA-HQ-OAR-2021-0324, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov> (our preferred method). Follow the online instructions for submitting comments.
- E-mail: a-and-r-Docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2021-0324 in the subject line of the message.
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, Air Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- Hand Delivery or Courier (by scheduled appointment only): EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov>, including any personal information provided. For the full EPA public comment policy, information about confidential business information (CBI) or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. We encourage the public to submit comments via <https://www.regulations.gov> or email, as there may be a delay in processing mail and faxes.

Hand deliveries and couriers may be received by scheduled appointment only. For further information on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our Federal partners so that we can respond rapidly as conditions change regarding COVID-19.

FOR FURTHER INFORMATION CONTACT: Dallas Burkholder, Office of Transportation and Air Quality, Assessment and Standards Division, Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone number: 734-214-4766; email address: RFS-Rulemakings@epa.gov. Comments on this proposal should not be submitted to this email address, but rather through <https://www.regulations.gov> as discussed in the **ADDRESSES** section.

SUPPLEMENTARY INFORMATION: Entities potentially affected by this proposed rule are those involved with the production, distribution, and sale of transportation fuels, including gasoline and diesel fuel, as well as renewable fuels such as ethanol, biodiesel, renewable diesel, and biogas. Potentially affected categories include:

Category	NAICS ¹ Codes	Examples of Potentially Affected Entities
Industry	324110	Petroleum refineries
Industry	325193	Ethyl alcohol manufacturing
Industry	325199	Other basic organic chemical manufacturing
Industry	424690	Chemical and allied products merchant wholesalers
Industry	424710	Petroleum bulk stations and terminals
Industry	424720	Petroleum and petroleum products merchant wholesalers
Industry	221210	Manufactured gas production and distribution
Industry	454319	Other fuel dealers

¹ North American Industry Classification System (NAICS).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this proposed action. This table lists the types of entities that EPA

is now aware could potentially be affected by this proposed action. Other types of entities not listed in the table could also be affected. To determine whether your entity would be affected by this proposed action, you should carefully examine the applicability criteria in 40 CFR parts 80 and 1090. If you have any questions regarding the applicability of this proposed action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

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A red-line version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action.

I. Executive Summary

The Renewable Fuel Standard (RFS) program began in 2006 pursuant to the requirements of the Energy Policy Act of 2005 (EPAAct), which were codified in Clean Air Act (CAA) section 211(o). The statutory requirements were subsequently amended by the Energy Independence and Security Act of 2007 (EISA). The statute sets forth annual, nationally applicable volume targets

for each of the four categories of renewable fuel. It also directs EPA to modify or establish volume targets in certain circumstances. EPA must then translate the volume targets into compliance obligations that obligated parties must meet every year.

In this action we are proposing the applicable volumes for cellulosic biofuel, advanced biofuel, and total renewable fuel for 2021 and 2022, and the biomass-based diesel (BBD) applicable volume for 2022,¹ as well as to modify the applicable volumes that EPA previously established for cellulosic biofuel, advanced biofuel, and total renewable fuel for 2020.^{2,3} We are also proposing the annual percentage standards (also known as “percent standards”) for cellulosic biofuel, BBD, advanced biofuel, and total renewable fuel that would apply to gasoline and diesel produced or imported by obligated parties in 2020, 2021, and 2022. In addition, we are also proposing to address the remand of the 2014-2016 annual rule by the D.C. Circuit Court of Appeals, in *Americans for Clean Energy v. EPA*, 864 F.3d 691 (2017) (hereafter “ACE”) by proposing a supplemental volume of 250 million gallons in 2022, and we intend to propose an additional supplemental volume of 250 million gallons for 2023 in a subsequent action.

¹ The 2021 BBD volume requirement was established in the 2020 final rule. 85 FR 7016 (February 6, 2020).

² 85 FR 7016 (February 6, 2020).

³ As explained in Section II, we did not trigger the reset authority for BBD. Thus, we are not proposing to reset the previously finalized 2020 and 2021 BBD volumes. In addition, actual BBD use in both 2020 and 2021 is projected to exceed the previously finalized volumes, so we see no need to retroactively reconsider the BBD volumes in any event. As discussed in Section III.E, we are proposing to set the 2022 BBD volume pursuant our “set” authority under CAA section 211(o)(2)(B)(ii)).

Table I-1: Proposed Volume Requirements (billion RINs)^a

Category	2020	2021	2022
Cellulosic Biofuel	0.51	0.62	0.77
Biomass-Based Diesel ^b	2.43 ^c	2.43 ^d	2.76
Advanced Biofuel	4.63	5.20	5.77
Total Renewable Fuel	17.13	18.52	20.77
Supplemental Standard	n/a	n/a	0.25

^a One Renewable Identification Number (RIN) is equivalent to one ethanol-equivalent gallon of renewable fuel. Throughout this preamble, RINs are generally used to describe total volumes in each of the four categories shown above, while gallons are generally used to describe volumes for individual types of biofuel such as ethanol, biodiesel, renewable diesel, etc. Exceptions include BBD, which is always given in physical volumes, and biogas and electricity, which are always given in RINs.

^b The BBD volumes are in physical gallons (rather than RINs).

^c Established in the 2019 RFS annual rule (83 FR 63704, December 11, 2018).

^d Established in the 2020 RFS annual rule (85 FR 7016, February 6, 2020).

Finally, we are proposing several regulatory changes to the RFS program, including regulations for the use of biointermediates to produce qualifying renewable fuel, flexibilities for regulated parties, and clarifications of existing regulations.

A. Legal Authorities to Modify and Establish Renewable Fuel Volumes

For the 2020, 2021, and 2022 cellulosic biofuel, advanced biofuel, and total renewable fuel volumes, EPA is fulfilling our statutory obligation to “reset” the statutory volumes in accordance with CAA section 211(o)(7)(F). This provision, entitled “Modification of Applicable Volumes,” provides that, if a waiver of any statutory volume target exceeds specified thresholds, EPA shall modify or “reset” the statutory volume targets for all years following the year that the threshold was exceeded. This obligation has been triggered by EPA actions waiving volumes in previous annual standard-setting rulemakings. Under this statutory provision, we are proposing new volume targets for cellulosic biofuel, advanced biofuel, and total renewable fuel for 2020, 2021, and 2022.⁴

⁴ As we explain further in Section II, we are also independently justifying the 2020, 2021, and 2022 cellulosic biofuel volumes and the 2022 advanced biofuel and total renewable fuel volumes under the cellulosic waiver authority.

When resetting the statutory targets, EPA must comply with the processes, criteria, and standards set forth in CAA section 211(o)(2)(B)(ii). In addition to reviewing the implementation of the program during previous years and coordinating with the Secretary of Energy and the Secretary of Agriculture, EPA must also analyze several factors:

- The impact of the production and use of renewable fuels on the environment, including on air quality, climate change, conversion of wetlands, ecosystems, wildlife habitat, water quality, and water supply;
- The impact of renewable fuels on the energy security of the U.S.;
- The expected annual rate of future commercial production of renewable fuels, including advanced biofuels in each category (cellulosic biofuel and BBD);
- The impact of renewable fuels on the infrastructure of the U.S., including deliverability of materials, goods, and products other than renewable fuel, and the sufficiency of infrastructure to deliver and use renewable fuel;
- The impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods; and
- The impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and food prices.

With respect to the 2022 BBD volume, we are setting this volume under CAA section 211(o)(2)(B)(ii). The requirement to reset the statutory volume targets does not apply to BBD. However, CAA section 211(o)(2)(B)(ii) separately requires that EPA set the BBD volume for years including 2022 based on an analysis of the same statutory factors as the reset authority.

In addition to these statutory provisions, the D.C. Circuit has also established principles that EPA must follow when promulgating RFS rulemakings after the statutory deadline as well

as retroactive RFS rulemakings.⁵ Namely, EPA has authority to promulgate such RFS rules, but EPA must reasonably consider and mitigate the burdens on obligated parties. Several aspects of this rulemaking are either retroactive or will be finalized after the statutory deadline, or both. Therefore we consider this caselaw as required by the court. We further discuss all our legal authorities to modify or establish volumes in Section II.

B. 2020 Volumes

EPA established the applicable 2020 volume requirements and percentage standards in late 2019.⁶ Since we promulgated those standards, several significant and unanticipated events occurred that affected the fuels markets in 2020. The two most prominent of these events were:

- The COVID-19 pandemic and the ensuing fall in transportation fuel demand, especially the disproportionate fall in gasoline demand relative to diesel demand, which significantly reduced the production and use of biofuels in 2020 below the volumes we anticipated could be achieved, and
- The potential that the volume of gasoline and diesel exempted from 2020 RFS obligations through small refinery exemption (SREs) will be far lower than projected in the 2020 final rule.

These events are expected to adversely affect the ability of obligated parties to comply with the applicable standards and to achieve the intended volumes in the 2020 final rule.⁷ As a result, we are proposing to retroactively adjust the 2020 volumes and standards to reflect the actual volumes of renewable fuels and transportation fuel consumed in the U.S. As we discuss

⁵ See, e.g., *Americans for Clean Energy v. EPA*, 864 F.3d 691 (D.C. Cir. 2017); *Monroe Energy, LLC v. EPA*, 750 F.3d 909 (D.C. Cir. 2014); *Nat'l Petrochemical & Refiners Ass'n v. EPA*, 630 F.3d 145, 154-58 (D.C. Cir. 2010).

⁶ 85 FR 7016 (February 6, 2020).

⁷ EPA extended the 2020 compliance deadline for obligated parties to January 31, 2022 (86 FR 17073, April 1, 2021). We have proposed to further extend that deadline in a separate action (86 FR 67419, November 26, 2021).

further in Sections III and IV, these revised volumes are supported by our analysis of the statutory factors that we must consider when resetting RFS volumes.

C. 2021 Volumes

We are proposing volumes for 2021 that are equal to our projection of the volume of cellulosic biofuel, advanced biofuel, and total renewable fuel that will be used in the U.S. in 2021. Much like our proposed volumes for 2015,⁸ which were similarly retroactive and promulgated after the statutory deadline, these volume projections are based on actual renewable fuel use for months in 2021 where data are available and projections of renewable fuel use for the remainder of the year. These volumes include both renewable fuel that is produced domestically as well as imported renewable fuel that is used in the U.S. As discussed in further detail in Sections III and IV of this proposal, we believe this approach for 2021 is appropriate based on our analysis of the statutory factors EPA must analyze when resetting the RFS volumes, including our finding that this retroactive rulemaking has limited ability to incentivize increased production and use of renewable fuel in 2021.

D. 2022 Volumes

The proposed volumes for 2022 are significantly higher than the proposed volumes for 2020 and 2021. As we discuss further in Sections III and IV, these volumes are based on our analysis of the statutory factors, including our assessment of the ability for the RFS program to incentivize increased production and use of renewable fuel in 2022, the statutory intent to support increasing production and use of renewable fuels, and the potential positive impacts of renewable fuels on several of the statutory factors such as climate change and energy security. The proposed volumes for 2022 also reflect the adverse impacts of biofuels on some statutory factors, including market and infrastructure constraints to the ability of RFS annual volume

⁸ 80 FR 33100 (June 10, 2015).

requirements to incentivize increased production and use of renewable fuel in the near term.

These constraints include the commercial availability of cellulosic biofuel, the price and availability of feedstocks, and the availability of infrastructure to distribute higher level blends of ethanol.

E. Response to the ACE Remand

In 2015, EPA established the total renewable fuel standard for 2016. As part of that rule, we relied upon the general waiver authority under a finding of inadequate domestic supply to reduce the total renewable fuel volume target by 500 million gallons.⁹ Several parties challenged that action, and in *ACE* the U.S. Court of Appeals for the D.C. Circuit vacated EPA's use of the general waiver authority, finding that such use exceeded EPA's authority under the CAA. Specifically, EPA had impermissibly considered demand-side factors in its assessment of inadequate domestic supply, rather than limiting that assessment to supply-side factors. The court remanded the rule back to EPA for further consideration.

We now intend to restore the full 500 million gallons that we improperly waived in the 2016 rule but to do so over two years. Specifically, as we discuss further in Section V, we are proposing to add a supplemental volume obligation of 250 million gallons to the proposed 2022 standards. We also intend to propose an additional supplemental volume of 250 million gallons for 2023 in a subsequent action.

F. Annual Percentage Standards

The statute directs EPA to establish annual standards that translate the nationally applicable volume targets into compliance obligations on obligated parties. In this action, EPA is proposing annual standards for 2020, 2021, and 2022 for all four categories of renewable fuel.

⁹ See 80 FR 77420 (December 14, 2015); CAA section 211(o)(7)(A)(ii).

We are also proposing a supplemental standard to address the *ACE* remand, which will apply in the 2022 compliance year.

The renewable fuel standards are expressed as a volume percentage and are used by each refiner and importer of fossil-based gasoline or diesel to determine their renewable fuel volume obligations. The specific formulas we use in calculating the renewable fuel percentage standards are found in 40 CFR 80.1405. Four separate percentage standards are required under the RFS program, corresponding to the four separate renewable fuel categories shown in Table I-1. The proposed standards are shown in Table I.E-1. Details, including the projected gasoline and diesel volumes used, can be found in Section VI.

In the 2020 standards final rule, we modified the formulas used to calculate the percentage standards to account for a projection of exempt gasoline and diesel volumes produced by small refineries.¹⁰ Subsequent to the promulgation of that rule, the Tenth Circuit Court of Appeals vacated three EPA SRE decisions as exceeding our statutory authority in *Renewable Fuels Association v. EPA* (hereinafter *RFA*).¹¹ Most recently, the Supreme Court, in *HollyFrontier v. Renewable Fuels Association* (hereinafter *HollyFrontier*), vacated one of the bases for the *RFA* decision, holding that small refineries need not have had continuous exemptions since the original statutory exemption, but did not opine on the other two holdings in *RFA* because those issues were not appealed to the Court. We continue to consider the impact of these decisions on our SRE policy, and it is still unclear at this time whether we will be granting SREs for 2020, 2021, or 2022, and if so, to what degree. Thus, we are proposing a range of exempted volumes of gasoline and diesel as a result of SREs in the calculation of the applicable percentage standards, ranging from zero to 8.19 billion gallons.

¹⁰ 85 FR 7016 (February 6, 2020).

¹¹ *Renewable Fuels Ass'n v. EPA*, 948 F.3d 1206 (10th Cir. 2020), *rev'd in part sub nom., HollyFrontier Cheyenne Refining, LLC, v. Renewable Fuels Ass'n*, 114 S. Ct. 2172 (2021).

The resulting range in the proposed percentage standards is shown in Table I.F-1.

Table I.F-1: Proposed Percentage Standards^a

Category	2020		2021		2022	
	Low	High	Low	High	Low	High
Cellulosic Biofuel	0.32%	0.34%	0.36%	0.38%	0.44%	0.46%
Biomass-Based Diesel	2.37%	2.50%	2.19%	2.30%	2.42%	2.54%
Advanced Biofuel	2.91%	3.07%	3.03%	3.18%	3.27%	3.42%
Renewable Fuel	10.78%	11.36%	10.79%	11.33%	11.76%	12.33%
Supplemental Standard	n/a	n/a	n/a	n/a	0.14%	0.15%

^a Low values do not include any projected exempted gasoline and diesel volumes from SREs. High values include 8.19 billion gallons of projected exempted gasoline and diesel from SREs.

G. Biointermediates

Since the RFS2 program was finalized in 2010, we have been made increasingly aware of renewable fuel producers that would like to process fuel at more than one facility. Specifically, renewable fuel producers would like to first have a facility process renewable biomass into a proto-renewable fuel (or “biointermediate”) and then have a second, separate facility process that biointermediate into renewable fuel. In some cases, it may be preferable for economic or practical reasons for renewable biomass to be subjected to substantial pre-processing at one facility before being sent to a different facility where it is converted into renewable fuel. For example, renewable biomass may be converted into a biointermediate (such as a biocrude) at one facility that requires some additional processing at a different facility before it can be used as transportation fuel. These production methodologies have the potential to lower the cost of using cellulosic and other feedstocks for the production of renewable fuels by reducing capital costs for new facilities and/or the storage and transportation costs associated with feedstock handling—especially for cellulosic biomass. Thus, we believe that such technologies provide an opportunity for the future growth in production of the cellulosic biofuels required under the RFS program. Based on this potential for future growth, in 2016 we included in the proposed the Renewables

Enhancement and Growth Support (REGS) rule provisions to allow for the production, transfer, and use of biointermediates to generate qualifying renewable fuel under the RFS program.¹²

Due to the elapsed time since the proposed REGS rule and our continued consideration of how to most effectively allow biointermediates into the program, we are proposing anew provisions to allow for the use of biointermediates to produce qualifying renewable fuels. Consistent with what we previously proposed in the REGS rule, these provisions specify requirements that apply when renewable fuel is produced through sequential operations at more than one facility. These provisions center around the production, transfer, and use of biointermediates and the creation of new regulatory requirements related to registration, recordkeeping, and reporting for facilities producing or using a biointermediate for renewable fuel production. We are reproposing many of the proposed biointermediate provisions from the REGS rule without significant changes, making significant changes to some of the previously proposed provisions, and proposing some provisions for the first time here. We further discuss biointermediates in Section VII.

H. Other Changes

We have identified several areas where regulatory changes would assist EPA in implementing our fuel quality and RFS programs. These proposed regulatory changes include:

- Changing the BBD weighting factor from 1.50 to 1.55
- Changes to registration for baseline volumes
- Changes to attest engagements for parties owning Renewable Identification Numbers (RINs)
- Treatment of confidential business information

¹² See 81 FR 80828 (November 16, 2016).

- Clarifying the definition of “agricultural digesters”
- Adding a definition of “produced from renewable biomass”
- Other minor changes and technical corrections

Each of these regulatory changes is discussed in greater detail in Section VIII. In Section VIII, we also seek comment on potential changes to our treatment of landfill emissions in our lifecycle greenhouse gas (GHG) analysis for fuels produced from separated municipal solid waste.

I. Environmental Justice

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes Federal executive policy on environmental justice (“EJ”). It directs Federal agencies, to the greatest extent practicable and permitted by law, to make achieving EJ part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. EPA defines EJ as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.¹³ Executive Order 14008 (86 FR 7619, February 1, 2021) also calls on Federal agencies to make achieving EJ part of their missions “by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.” It also declares a policy “to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and under-investment in housing, transportation,

¹³ See, e.g., “Environmental Justice.” Epa.gov, Environmental Protection Agency, 4 Mar. 2021, <https://www.epa.gov/environmentaljustice>

water and wastewater infrastructure and health care.” EPA also released its “Technical Guidance for Assessing Environmental Justice in Regulatory Analysis” providing recommendations on conducting the highest quality analysis feasible, recognizing that data limitations, time and resource constraints, and analytic challenges will vary by media and regulatory context.¹⁴

When assessing the potential for disproportionately high and adverse health or environmental impacts of regulatory actions on minority populations, low-income populations, tribes, and/or indigenous peoples, EPA strives to answer three broad questions: (1) Is there evidence of potential EJ concerns in the baseline (the state of the world absent the regulatory action)? Assessing the baseline will allow EPA to determine whether pre-existing disparities are associated with the pollutant(s) under consideration (e.g., if the effects of the pollutant(s) are more concentrated in some population groups). (2) Is there evidence of potential EJ concerns for the regulatory option(s) under consideration? Specifically, how are the pollutant(s) and their effects distributed for the regulatory options under consideration? And, (3) do the regulatory option(s) under consideration exacerbate or mitigate EJ concerns relative to the baseline? It is not always possible to assess these questions in ways that produce quantitative results, though it may still be possible to describe them qualitatively.

EPA’s 2016 Technical Guidance does not prescribe or recommend a specific approach or methodology for conducting an EJ analysis, though a key consideration is consistency with the assumptions underlying other parts of the regulatory analysis when evaluating the baseline and regulatory options. Where applicable and practicable, the Agency endeavors to conduct such an analysis. Going forward, EPA is committed to conducting EJ analysis for rulemakings based on a

¹⁴ The definitions and criteria for “disproportionate impacts,” “difference,” and “differential” are contained in EPA’s June 2016 guidance document “Technical Guidance for Assessing Environmental Justice in Regulatory Analysis.” Epa.gov, Environmental Protection Agency, https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf

framework similar to what is outlined in EPA’s Technical Guidance, in addition to investigating ways to further weave EJ into the fabric of the rulemaking process.

In 2009, under the *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (“Endangerment Finding”), the Administrator considered how climate change threatens the health and welfare of the U.S. population. As part of that consideration, he also considered risks to minority and low-income individuals and communities, finding that certain parts of the U.S. population may be especially vulnerable based on their characteristics or circumstances. These groups include economically and socially disadvantaged communities; individuals at vulnerable lifestages, such as the elderly, the very young, and pregnant or nursing women; those already in poor health or with comorbidities; the disabled; those experiencing homelessness, mental illness, or substance abuse; and/or Indigenous or minority populations dependent on one or limited resources for subsistence due to factors including but not limited to geography, access, and mobility.

Scientific assessment reports produced over the past decade by the U.S. Global Change Research Program (USGCRP),^{15,16} the Intergovernmental Panel on Climate Change

¹⁵ USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018.

¹⁶ USGCRP, 2016: *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. U.S. Global Change Research Program, Washington, DC, 312 pp. <http://dx.doi.org/10.7930/J0R49NQX>

(IPCC),^{17,18,19,20} and the National Academies of Science, Engineering, and Medicine^{21,22} add more evidence that the impacts of climate change raise potential EJ concerns. These reports conclude that poorer or predominantly non-White communities can be especially vulnerable to climate change impacts because they tend to have limited adaptive capacities and are more dependent on climate-sensitive resources such as local water and food supplies, or have less access to social and information resources. Some communities of color, specifically populations defined jointly by ethnic/racial characteristics and geographic location, may be uniquely vulnerable to climate change health impacts in the United States. In particular, the 2016 scientific assessment on the *Impacts of Climate Change on Human Health* found with high confidence that vulnerabilities are place- and time-specific, lifestages and ages are linked to immediate and future health impacts, and social determinants of health are linked to greater extent and severity of climate change-related health impacts.

¹⁷ Oppenheimer, M., M. Campos, R. Warren, J. Birkmann, G. Luber, B. O'Neill, and K. Takahashi, 2014: Emergent risks and key vulnerabilities. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1039-1099.

¹⁸ Porter, J.R., L. Xie, A.J. Challinor, K. Cochrane, S.M. Howden, M.M. Iqbal, D.B. Lobell, and M.I. Travasso, 2014: Food security and food production systems. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 485-533.

¹⁹ Smith, K.R., A. Woodward, D. Campbell-Lendrum, D.D. Chadee, Y. Honda, Q. Liu, J.M. Olwoch, B. Revich, and R. Sauerborn, 2014: Human health: impacts, adaptation, and co-benefits. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 709-754.

²⁰ IPCC, 2018: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press.

²¹ National Research Council. 2011. *America's Climate Choices*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12781>

²² National Academies of Sciences, Engineering, and Medicine. 2017. *Communities in Action: Pathways to Health Equity*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24624>

This proposed rule has the potential to reduce GHG emissions which would benefit all populations including minority populations, low-income populations, and indigenous populations. The manner in which the market responds to the provisions in this proposed rule could also have non-GHG impacts. For instance, replacing petroleum fuels with renewable fuels could have impacts on water, air, and hazardous waste exposure for communities living near either existing or new facilities that produce these fuels. Replacing petroleum fuels with renewable fuels could also impact feedstock supplies and land-use, which could impact a range of communities through their impacts on air, water, and soil quality, as well as water quantity. Impacts on water quality in particular could impact communities that rely on aquatic ecosystems for income or sustenance, including indigenous peoples. While replacing petroleum fuels with renewable fuels is projected to cause small increases in food and fuel prices, these price impacts also may disproportionately affect low-income populations who spend a larger portion of their income on food and fuel.

The extent to which such changes may be unevenly distributed spatially in ways that coincide with patterns of pre-existing exposure and vulnerabilities for minority populations, low income populations, and/or indigenous peoples is uncertain and would require predicting where these changes in production and land use change would occur at a fine spatial scale. EPA is taking comment on ways in which such effects could be better evaluated for future rulemakings. A more detailed discussion of potential EJ concerns as a result of this action can be found in Chapter 8 of the Draft Regulatory Impacts Analysis (DRIA), available in the docket for this action.

J. Endangered Species Act

Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. 1536(a)(2), requires that Federal agencies such as EPA, along with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) (collectively “the Services”), ensure that any

action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. Under relevant implementing regulations, consultation is required only for actions that “may affect” listed species or designated critical habitat. 50 CFR 402.14. Consultation is not required where the action has no effect on such species or habitat. For several prior RFS annual standard-setting rules, EPA did not consult with the Services under section 7(a)(2).

On September 6, 2019, the United States Court of Appeals for the D.C. Circuit decided *American Fuel & Petrochemical Manufacturers v. EPA*, 937 F.3d 559 (2019), finding that EPA had failed to make an effects determination for ESA purposes with regard to the 2018 RFS rule and remanding the rule without vacatur to the Agency to make an appropriate effects determination. *See id.* at 598.

On July 16, 2021, the same court decided *Growth Energy v. EPA*, 5 F.4th 1 (2021), finding that EPA’s determination that the 2019 RFS rule would have no effect on listed species or the designated critical habitat of such species was arbitrary and capricious and remanding the rule to the Agency without vacatur to comply with the ruling. *See id.* at 32.

In light of this case law pertaining to EPA’s action in prior years and consistent with section 7(a)(2) of the ESA and relevant ESA implementing regulations at 50 CFR part 402, EPA intends to initiate consultation, as appropriate, with the Services regarding this proposed rule.²³ At this time, EPA is evaluating whether any federally listed threatened or endangered species or their critical habitat are likely to be adversely affected by the finalization of this rulemaking.

²³ EPA also intends to respond to the court’s remand of the 2018 and 2019 RFS rules in a separate proceeding. We are not revisiting our ESA obligations related to the 2018 or 2019 rules in this rulemaking; any comments received on those topics will be deemed beyond the scope of this rulemaking.

II. Legal Authorities to Reduce and Establish Volumes

The CAA provides EPA with several authorities to reduce or establish the applicable renewable fuel volumes. This section discusses the statutory authorities, additional factors we are considering due to the retroactivity or lateness of parts of this rulemaking, additional factors related to our reconsideration of the previously finalized standards for 2020, how we are applying our authorities to propose these volumes, as well as the severability of the various portions of this proposed rule.

A. Authorities to Modify Statutory Volumes Targets

In CAA section 211(o)(2), Congress specified increasing annual volume targets for total renewable fuel, advanced biofuel, and cellulosic biofuel for each year through 2022. However, Congress also recognized that under certain circumstances it would be appropriate for EPA to set different volume requirements than the statutory volume targets and thus provided waiver provisions in CAA section 211(o)(7). In this proposal, we are utilizing the cellulosic waiver authority under CAA section 211(o)(7)(D), and the reset authority under CAA section 211(o)(7)(F) to reduce volumes for 2020, 2021, and 2022. As discussed below, while we have previously sought comment on the use of general waiver authority to reduce volumes for 2020, the reductions proposed in this action are based on the use of our other authorities.

1. Cellulosic Waiver Authority

Section 211(o)(7)(D)(i) of the CAA provides that if EPA determines that the projected volume of cellulosic biofuel production for a given year is less than the applicable volume specified in the statute, then EPA must reduce the applicable volume of cellulosic biofuel required to the projected volume available for that calendar year. In making this projection, EPA must take a “neutral aim at accuracy.” *API v. EPA*, 706 F.3d 474, 479 (D.C. Cir. 2013). Pursuant

to this provision, EPA has set the cellulosic biofuel requirement lower than the statutory volume for each year since 2010.

CAA section 211(o)(7)(D)(i) also provides EPA with the authority to reduce the applicable volume of total renewable fuel and advanced biofuel in years when it reduces the applicable volume of cellulosic biofuel under that provision. The reduction must be less than or equal to the reduction in cellulosic biofuel. EPA has used this aspect of the cellulosic waiver authority to lower the advanced biofuel and total renewable fuel volumes every year since 2014. Further discussion of the cellulosic waiver authority, and EPA's interpretation of it, can be found in the preamble to the 2017 final rule.²⁴

2. Reset Authority

The CAA provides that EPA shall modify the statutorily prescribed RFS volumes once certain triggers are met. This section discusses the statutory requirements that trigger the use of this reset authority, describes the process and criteria for such use, and explains the impact of this modification on our other waiver authorities.

a. Conditions for Resetting Volume Targets

CAA section 211(o)(7)(F) sets forth EPA's authority to modify (or reset) the applicable volumes once certain triggers have been met. Specifically, EPA must reset the applicable volumes for a particular category of biofuel when, under CAA section 211(o)(7)(F)(i), we waive at least 20 percent of the applicable volume requirement for such category for two consecutive years, or, under CAA section 211(o)(7)(F)(ii), we waive at least 50 percent of such applicable

²⁴ See 81 FR 89752-89753 (December 12, 2016); see also *API v. EPA*, 706 F.3d 474 (D.C. Cir. 2013) (requiring that EPA's cellulosic biofuel projections reflect a neutral aim at accuracy); *Monroe Energy v. EPA*, 750 F.3d 909, 915-16 (D.C. Cir. 2014) (affirming EPA's broad discretion under the cellulosic waiver authority to reduce volumes of advanced biofuel and total renewable fuel); *Americans for Clean Energy v. EPA* ("ACE"), 864 F.3d 691, 730-735 (D.C. Cir. 2017) (same); *Alon Refining Krotz Spring, Inc. v. EPA*, 936 F.3d 628, 662-663 (D.C. Cir. 2019) (same); *American Fuel & Petrochemical Manufacturers v. EPA*, 937 F.3d 559, 577-78 (D.C. Cir. 2019) (same).

volume requirement for a single year. With the promulgation of the 2019 annual standards, these conditions have been met for three categories of biofuel: cellulosic biofuel, advanced biofuel, and total renewable fuel.²⁵ We describe below, for each category of biofuel, the specific annual rules that satisfied these conditions.

The conditions for resetting cellulosic biofuel volumes were met by the 2010 annual standard, which reduced the applicable cellulosic biofuel volume by at least 50 percent triggering application of the reset authority under CAA section 211(o)(7)(F). In that rule, we waived the cellulosic applicable volume for the first time using the cellulosic waiver authority.²⁶ We set the cellulosic biofuel applicable volume at 6.5 million gallons for 2010.²⁷ This waiver resulted in an applicable volume that was 93.5 percent lower than the applicable volume requirement provided in the statute, 100 million, thus triggering the reset requirement under CAA section 211(o)(7)(F)(ii). However, the statute also provides that “no such modification in applicable volumes shall be made for any year before 2016.” CAA section 211(o)(7)(F). Therefore, although the trigger to modify the cellulosic biofuel volume target under the reset provision was met in 2010, the statute did not require a change to the applicable volumes until 2016.

The conditions for resetting advanced biofuel volumes were met by the 2014 and 2015 annual standards, which reduced the applicable advanced biofuel volume by at least 20 percent for two consecutive years. For the 2014 annual standard, we waived the advanced biofuel volume for the first time.²⁸ We set the advanced biofuel volume at 2.67 billion gallons.²⁹ This represented a reduction of 28.8 percent from the applicable volume requirement provided in the statute (3.75 billion). This reduction therefore triggered the first year of reductions of at least 20 percent under CAA section 211(o)(7)(F)(i). For the 2015 annual standard, we reduced the

²⁵ Because the statutory volumes for biomass-based diesel lapsed after 2012, the reset provision, which only applies to 2016 and subsequent years, does not apply to BBD.

²⁶ 75 FR 14670 (March 26, 2010).

²⁷ 75 FR 14675.

²⁸ 80 FR 77420 (December 14, 2015).

²⁹ *Id.*

advanced biofuel applicable volume to 2.88 billion gallons.³⁰ This represented a reduction of 47.6 percent from the applicable volume requirement provided in the statute (5.5 billion). This represented the second consecutive year for which the Administrator waived volumes by at least 20 percent, thus triggering the modification of the advanced biofuel volume under CAA section 211(o)(7)(F)(i).

The conditions for resetting total renewable fuel volumes were met by the 2018 and 2019 annual standards, which reduced the applicable total renewable fuel volume by at least 20 percent for two consecutive years. For the 2018 annual standard, we reduced the total renewable fuel volume to 19.29 billion gallons.³¹ This represented a reduction of 25.8 percent from the applicable volume requirement provided in the statute (26 billion). This reduction therefore triggered the first year of reductions of at least 20 percent under CAA section 211(o)(7)(F)(i). For the 2019 annual standard, we reduced the total renewable fuel applicable volume to 19.92 billion gallons.³² This represented a reduction of 29 percent from the applicable volume requirement provided in the statute (28 billion). This represented the second consecutive year for which the Administrator waived volumes by at least 20 percent, thus triggering the modification of the total renewable fuel volume under CAA section 211(o)(7)(F)(i).³³

b. Factors That Must Be Analyzed

In resetting the statutory volumes, EPA must comply with the processes, criteria, and standards set forth in CAA section 211(o)(2)(B)(ii). That provision provides that the Administrator shall, in coordination with the Secretary of Energy and the Secretary of Agriculture, determine the applicable volumes of each biofuel category specified based on a

³⁰ *Id.*

³¹ 82 FR 58486 (December 12, 2017).

³² 83 FR 63704 (December 11, 2018).

³³ Although we are exercising the reset authority in this action for 2020-2022 volumes, we could have exercised the reset authority for the 2016-2019 cellulosic and advanced biofuel volumes as well. We do not, however, have authority to reset total renewable fuel volumes for those years. In any event, we are not proposing to revisit the 2016-2019 volumes in this rulemaking.

review of implementation of the program during the calendar years specified in the table, and an analysis of the impact of:

- The production and use of renewable fuels on the environment;
- The impact of renewable fuels on the energy security of the U.S.;
- The expected annual rate of future commercial production of renewable fuels;
- The impact of renewable fuels on the infrastructure of the U.S.;
- The impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods; and
- The impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and food prices.

While the statute requires that EPA base its determination on an analysis of these factors, it does not establish any numeric criteria, require a specific type of analysis (such as quantitative analysis), or provide guidance on how EPA should weigh the various factors. Additionally, we are not aware of anything in the legislative history of EISA that addresses these issues. Thus, as the Act “does not state what weight should be accorded to the relevant factors,” it “give[s] EPA considerable discretion to weigh and balance the various factors required by statute.”³⁴

Additionally, we also have authority to consider other factors, including implied authority to consider factors that inform our analysis of the statutory factors, as well as explicit authority to consider “the impact of the use of renewable fuels on other factors....”³⁵ Accordingly, we have considered several other factors, including the intertwined nature of compliance with the 2020-

³⁴ *Nat'l Wildlife Fed'n v. EPA*, 286 F.3d 554, 570 (D.C. Cir. 2002); accord *Riverkeeper, Inc. v. United States EPA*, 358 F.3d 174, 195 (2d Cir. 2004); *BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784, 802 (6th Cir. 1995); see also *Cal. by Brown v. Watt*, 668 F.2d 1290, 1317 (D.C. Cir. 1981) (“A balancing of factors is not the same as treating all factors equally. The obligation instead is to look at all factors and then balance the results. The Act does not mandate any particular balance, but vests the Secretary with discretion to weigh the elements....”).

³⁵ CAA section 211(o)(2)(B)(ii)(VI).

2022 standards, the size of the carryover RIN bank,³⁶ how the retroactive nature of the 2020 and 2021 standards as compared to the prospective nature of the 2022 annual and supplemental standards affects the feasibility of compliance (Section IV),³⁷ the supply of qualifying renewable fuels to U.S. consumers (Section III),³⁸ soil quality (Chapter 3 of the DRIA),³⁹ and environmental justice (Section I of this preamble and Chapter 8 of the DRIA).⁴⁰

c. Impact on other Statutory Authorities to Waive Volumes

Our proposed use of the reset authority in this action does not preclude our legal authority to waive volumes under the other waiver authorities. Nothing in the CAA suggests that once the volumes are reset they cannot be modified further, or that the reset authority cannot be used in conjunction with other waiver authorities such as the cellulosic waiver authority.⁴¹

3. General Waiver Authority

Section 211(o)(7)(A) of the CAA provides that EPA, in consultation with the Secretary of Agriculture and the Secretary of Energy, may waive the applicable volumes specified in the Act in whole or in part based on a petition by one or more States, by any person subject to the requirements of the Act, or by the EPA Administrator by his own initiative. Such a waiver must be based on a determination by the Administrator, after public notice and opportunity for

³⁶ The first two factors inform our analysis of the statutory factor “review of the implementation of the program.” CAA section 211(o)(2)(B)(ii).

³⁷ The third factor (how the standards affect the feasibility of compliance) also informs our analysis of the statutory factor “the expected annual rate of future commercial production of renewable fuels.” CAA section 211(o)(2)(B)(ii)(III).

³⁸ The fourth factor (supply of renewable fuels) is based on our analysis of this same statutory factor as well as of downstream constraints on biofuel use, including the statutory factors relating to infrastructure and costs. CAA section 211(o)(2)(B)(ii)(IV)-(V).

³⁹ Soil quality is closely tied to water quality and is also relevant to the impact of renewable fuels on the environment more generally.

⁴⁰ Environmental justice involves consideration of the impact of renewable fuels on several factors, including environmental and cost factors. This and the other non-enumerated factors are also relevant under the statutory factor “the impact of the use of renewable fuels on other factors....” CAA section 211(o)(2)(B)(ii)(VI).

⁴¹ See *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Intern., Inc.*, 534 U.S. 124, 143-44 (2001) (holding that when two statutes are capable of coexistence and there is not clearly expressed legislative intent to the contrary, each should be regarded as effective).

comment that: (1) implementation of the requirement would severely harm the economy or the environment of a State, a region, or the United States; or (2) there is an inadequate domestic supply.

EPA received several requests for use of the general waiver authority for the 2020 standards from stakeholders concerned about the impacts on the fuels markets resulting from the COVID-19 pandemic. These included requests from the governors of multiple states based on their belief that the criteria for application of the general waiver authority were satisfied and that lowering the required volumes for 2020 was appropriate. We published a notice in the *Federal Register* seeking comment on these requests.⁴² We are not proposing modifications to the 2020 volumes utilizing the general waiver authority in this action. In lieu of doing so, we are proposing to revise the 2020 volumes under our reset authority as discussed in Section III.B. Our proposal addresses many of the concerns raised in the general waiver petitions, including the shortfall in RIN generation in 2020, uncertainty regarding SREs following the Tenth Circuit's decision in *RFA*, and the hurdles those may present to obligated parties' compliance.

B. Authority to Establish BBD Volumes

EPA has established the biomass-based diesel requirement under CAA section 211(o)(2)(B)(ii) since 2013 because the statute only provided BBD volumes through 2012. Thus, EPA is proposing an applicable volume for BBD for 2022 under this authority, which we term the “set” authority.⁴³ As discussed in prior annual rulemakings, EPA is to determine the applicable volume of BBD, in coordination with the Secretary of Energy and the Secretary of Agriculture, based on an analysis of the same statutory factors enumerated above for “resetting”

⁴² 86 FR 5182 (January 19, 2021). Comments on these requests are available in the docket for that notice, EPA-HQ-OAR-2020-0322. We have recently received an additional request to waive volumes using the general waiver authority from the Governor of Montana, available in the docket for this action.

⁴³ The applicable volume for BBD for 2021 was established in the 2020 annual rulemaking, 85 FR 7016 (February 6, 2020).

volumes for the other fuel categories.⁴⁴ The statute also requires that the BBD volume be set at or greater than the 1.0 billion gallon volume requirement for 2012 in the statute, but does not provide any other numerical criteria that EPA is to consider.

C. Considerations for Retroactive and Late Rulemaking

In this rulemaking, we are proposing several late or retroactive standards. EPA has in the past also missed statutory deadlines for promulgating RFS annual standards. In those cases, the D.C. Circuit found that EPA retains authority to promulgate annual standards for the years in question, so long as EPA exercises this authority reasonably.⁴⁵ In doing so, EPA must balance the burden on obligated parties of a retroactive standard with the broader goal of the RFS program to increase renewable fuel use.⁴⁶ Even if the rule does not operate retroactively, but is promulgated after the statutory deadline, EPA must consider and mitigate the burdens on obligated parties associated with a delayed rulemaking.⁴⁷ In upholding EPA's retroactive standards for 2014 and 2015 in *ACE*, the court considered several specific factors, including the availability of RINs for compliance, the amount of lead time and adequate notice for obligated parties, and the availability of compliance flexibilities. Additionally, the court separately addressed rulemakings that were late (i.e., those issued after the statutory deadline) but were nonetheless not retroactive, emphasizing in that context the amount of lead time and adequate notice for obligated parties.⁴⁸

In this rulemaking, we are proposing to exercise our reset authority after the statutory deadline of December 11, 2019 (which is one year after the promulgation of the 2019 final rule,

⁴⁴ 85 FR 7016, 7047-7048 (February 6, 2020).

⁴⁵ *Americans for Clean Energy v. EPA*, 864 F.3d 691, 720 (D.C. Cir. 2017) (*ACE*); *Monroe Energy, LLC v. EPA*, 750 F.3d 909 (D.C. Cir. 2014); *Nat'l Petrochemical & Refiners Ass'n v. EPA*, 630 F.3d 145, 154-58 (D.C. Cir. 2010) (*NPRA*).

⁴⁶ *NPRA*, at 154-58 (D.C. Cir. 2010).

⁴⁷ *ACE*, 864 F.3d 691, 718 (D.C. Cir. 2017).

⁴⁸ *Id.* at 721.

which triggered the reset obligation for total renewable fuel).⁴⁹ We are also proposing to exercise our set authority for the 2022 BBD volume after the statutory deadline of October 31, 2020. We are also promulgating the 2020 and 2021 standards after their statutory deadlines of November 30, 2019 and 2020 respectively.⁵⁰ These standards are retroactive and apply to gasoline and diesel produced or imported in 2020 and 2021. We discuss in detail the considerations for late or retroactive rulemaking for each of these requirements further in Section III.

In addition, in responding to the *ACE* remand of the 2016 annual rule, EPA is proposing a supplemental standard for 2022.⁵¹ We are proposing this supplemental standard after the statutory deadline for the 2016 standards (November 30, 2015). However, the proposed supplemental standard would prospectively apply to gasoline and diesel produced or imported in 2022. We further discuss our response to the *ACE* remand in Section V.

We acknowledge that the final rule will be issued after November 30, 2021, thus rendering the 2022 and supplemental standards late and retroactive.⁵² Nonetheless, we are issuing this proposal in advance of 2022, and we anticipate that the final rule will apply mostly, if not entirely, prospectively to 2022. Thus, we believe the rule will be able to incent increased renewable fuel demand in that year consistent with the analysis in this proposal.

D. Considerations in Revisiting an Established RFS Standard

We are proposing to revise the previously finalized 2020 standards in this rulemaking. We generally have authority to reconsider and revise previously finalized RFS standards.⁵³ In

⁴⁹ This was the deadline for resetting total renewable fuel volumes. The deadline for resetting advanced and cellulosic volumes passed earlier.

⁵⁰ These are also the deadlines for exercising the cellulosic waiver authority for those years, which we will also miss.

⁵¹ We also intend to propose a supplemental standard for 2023 in a subsequent action.

⁵² As discussed in Section V, the supplemental standard in response to the *ACE* remand is already late.

⁵³ Nonetheless, we believe that we generally should not revisit past RFS standards. Doing so carries inherent costs for regulatory certainty and may unduly disrupt market expectations created by previously promulgated standards. Moreover, in the 2020 final rule itself, we expressly stated that we did not intend to revisit that rulemaking and subsequently adjust the standards. See Response to Comments at 173, EPA-HQ-OAR-2019-0136.

addition, the D.C. Circuit has held that EPA has authority to promulgate RFS standards retroactively. CAA section 211(o)(7) generally authorizes EPA to adjust the volume requirements based on appropriate considerations as well. In this action we are proposing to revise the 2020 standards in response to several unanticipated and exceptional events that have occurred since the promulgation of the standards and that have had direct and significant impacts on the fuels market and the ability of obligated parties to comply. We discuss these events and our rationale for revising the 2020 standards further in Section III.B.⁵⁴

E. Applicability of Legal Authorities to Establish the Volume Requirements

EPA is proposing to reduce the applicable statutory volumes for 2020, 2021 and 2022 utilizing both the cellulosic waiver and reset authorities. As described in Chapter 4 of the DRIA, the projected volumes of cellulosic biofuel production for 2020, 2021, and 2022 are all significantly less than the volume targets in the statute. Therefore, the cellulosic waiver authority requires EPA to lower the cellulosic biofuel volume for each year to the projected volumes available in each year. We are proposing to do so in this action. Additionally, we propose to find that these volumes are also appropriate under our reset authority.

For advanced biofuel and total renewable fuel, we are proposing, under the reset authority alone, volumes equal to the projected actual volumes of such fuels available in 2020 and 2021. We recognize that this exceeds our maximum discretion under the cellulosic waiver authority; however, as we explain further in Section III, we do not believe that the lowest

⁵⁴ EPA also received two petitions from AFPM and API in early 2020 seeking reconsideration of the 2020 annual rule under CAA section 307(d)(7)(B) in light of the *RFA* decision and its impact on EPA's projections of SREs in calculating the percentage standards. These petitions are available in the docket. See AFPM, *Petition for Administrative Reconsideration of Renewable Fuel Standard Program: Standards for 2020 and Biomass-Based Diesel Volume for 2021 and Other Changes*, 85 Fed. Reg. 7,016 (Feb. 6, 2020) (Mar. 24, 2020); API, *Petition for Reconsideration of the RFS 2020 Rule*, EPA-HQ-OAR-2019-0136 (April 6, 2020). We are not at this time determining whether these petitions met the standards for reconsideration under CAA section 307(d)(7)(B). Nonetheless, for the reasons described in this document, we believe it is appropriate to reconsider the 2020 RFS standards, and we are providing the procedural process (i.e., a CAA section 307(d) rulemaking to reconsider the 2020 RFS standards) requested in the petitions.

volumes permissible under the cellulosic waiver authority are appropriate based upon our consideration of the reset factors.⁵⁵ For 2022, we are proposing, under both the cellulosic waiver authority and the reset authority, advanced biofuel and total renewable fuel volumes equal to the implied statutory volumes. This represents the maximum permitted reduction under the cellulosic waiver authority.⁵⁶ We also believe these volumes are appropriate under the reset authority.

In Sections III and IV and Chapter 2 of the DRIA, we set forth our policy and technical rationale for the proposed 2020, 2021, and 2022 volumes for cellulosic biofuel, advanced biofuel, and total renewable fuel. Our analysis is framed in terms of the statutory factors that the reset authority requires us to consider, along with the considerations for retroactive and late rules identified by the D.C. Circuit.⁵⁷ Since this analysis subsumes our policy and technical rationale for exercising the cellulosic waiver authority as well, we are not providing a separate analysis for the application of the cellulosic waiver authority.

We believe that subsuming the analysis for the application of the cellulosic waiver authority into the analysis for the application of the reset authority is appropriate for three reasons. First, with respect to the cellulosic biofuel volume for each year, the cellulosic waiver authority requires EPA to lower that volume to the projected volume available. This quantity is also a relevant consideration under the reset authority, and, accordingly, we have considered it in that context. See, e.g., CAA section 211(o)(2)(B)(ii)(III) (“the expected annual rate of future commercial production of renewable fuels”). Second, with respect to advanced biofuel and total renewable fuel, the cellulosic waiver authority does not specify any factors for EPA to consider (besides limiting the maximum quantity of reductions to the reduction in the cellulosic biofuel volume), and thus provides EPA broad discretion to consider relevant factors, including the

⁵⁵ Under the cellulosic waiver authority, when EPA reduces the volume of cellulosic biofuel, EPA may reduce the advanced biofuel and total renewable fuel volumes by the same or a lesser amount.

⁵⁶ This is also consistent with our authority to apply equal reductions to the volumes of advanced biofuel and total renewable fuel under the cellulosic waiver. CAA(o)(7)(D)(i), see also 85 FR 7016, 7047-7048 (February 6, 2020).

⁵⁷ Further detail on our analysis of the statutory factors is found in the DRIA.

factors we are considering in this proposal under the reset authority.⁵⁸ Third, given the significant overlap between the analyses used for the cellulosic waiver and reset authorities, we do not believe that two sets of analyses would provide significant additional value, but would be redundant for both EPA and the public.

We are also proposing a BBD volume for 2022 of 2.76 billion gallons under CAA section 211(o)(2)(B)(ii). Our policy and technical rationale for this volume is also set forth in Section III and Chapter 10 of the DRIA.

F. Severability

The following portions of this rulemaking are mutually severable from each other: (1) The volumes and percentage standards for 2020, 2021, and 2022; (2) The 2022 supplemental volume and standard; (3) The proposed provisions for biointermediates (discussed in Section VII); and (4) The regulatory amendments discussed in Section VIII. Each of the regulatory amendments in Section VIII is also severable from all the other regulatory amendments.

If any of the above portions is set aside by a reviewing court, we intend the remainder of this action to remain effective. For instance, if a reviewing court sets aside the 2022

⁵⁸ In past annual rules, we considered many of the same factors as we do in this proposal, albeit under the guise of different terminology, such as “reasonably attainable” and “attainable” volumes. See Section IV of the 2020 final rule at 85 FR 7016. For instance, in that rule, just as in this rule, we considered feedstock availability, advanced biofuel production and distribution capacity, environmental impacts, and costs. We acknowledge that the analytical framework has shifted somewhat given the focus on the statutory reset factors. For instance, in the 2020 final rule, unlike in this proposed rule, we did not explicitly consider the impacts of renewable fuels on job creation or rural economic development. Nonetheless, we believe those statutory factors (along with all the other factors we are considering under the reset authority) are ones that EPA may consider under the discretion we have under the cellulosic waiver authority. Congress’s specification of those factors in the reset authority further suggests that they are permissible considerations for determining volumes generally, including in exercising the cellulosic waiver. This approach presents a shift in EPA’s policy for the cellulosic waiver that we explicitly recognize and adopt as reasonable for the reasons described in this proposal. See *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009). Ultimately, we note that the 2020, 2021, and 2022 total renewable fuel, advanced biofuel, and cellulosic biofuel volumes are all independently justified by the reset authority. Thus, any defect in our exercise of the cellulosic waiver authority is harmless so long as we have properly exercised the reset authority.

supplemental volume and standard, we intend the remaining 2020-2022 volumes and percentage standards, biointermediates provisions, and other regulatory amendments, to remain effective.

III. Proposed Volumes

We are proposing 2020, 2021, and 2022 cellulosic biofuel, advanced biofuel, and total renewable fuel volumes under our reset authority.⁵⁹ We are proposing the 2022 biomass-based diesel (BBD) volume under our set authority. As required by both the reset and set authorities, we have analyzed the statutory factors under CAA section 211(o)(2)(B)(ii). We have also coordinated with the Secretary of Energy and the Secretary of Agriculture, including through the interagency review process, and their input is reflected in this proposal.

In Section III.A, we summarize our analyses as they apply to each of three component categories of biofuel: cellulosic biofuel, non-cellulosic advanced biofuel, and conventional renewable fuel.⁶⁰ In Sections III.B through F, we describe our proposed volumes for 2020, 2021, and 2022, along with our supporting assessment of the statutory factors. In Section III.G, we summarize the fuel costs and energy security benefits of the proposed volumes. In Section IV, we further discuss the relationship between the volume requirements for all three years as part of our review of the implementation of the program. Our preamble discussion provides a high-level, narrative summary of the statutory factors, focusing on the factors that we deem most appropriate. A more detailed discussion of all the statutory factors is set forth in the DRIA.

⁵⁹ As we explained in Section II.D, some of the volumes we are proposing in this action are also independently justified under the cellulosic waiver authority, but the policy and technical analysis for our exercise of the cellulosic waiver is subsumed under our analysis of the reset factors.

⁶⁰ Cellulosic biofuel corresponds directly to the statutory biofuel category. Cellulosic biofuel plus non-cellulosic advanced biofuel constitute the statutory advanced biofuel category. Finally, advanced biofuel plus conventional renewable fuel constitute the statutory total renewable fuel category. See CAA section 211(o)(2)(B)(i)(I)-(IV).

A. EPA's Assessment of the Statutory Factors for Each Component Category of Biofuel

1. Cellulosic Biofuel

In EISA, Congress established escalating targets for cellulosic biofuel, reaching 16 billion gallons in 2022. After 2015, 84 percent of the growth in statutory volume of total renewable fuel was intended to come from cellulosic biofuel.⁶¹ This indicates that Congress intended the RFS program to provide a significant incentive for cellulosic biofuels and that the focus for years after 2015 was to be on cellulosic. Consistent with this intent, our assessment of the statutory factors suggests that cellulosic biofuels have multiple benefits, including the potential for very low lifecycle GHG emissions that meet or exceed the 60 percent GHG reduction threshold for cellulosic biofuel. Many of these benefits stem from the fact that nearly all of the feedstocks projected to be used to produce cellulosic biofuel through 2022 are either waste materials (as in the case of compressed natural gas and liquified natural gas (CNG/LNG) derived from biogas) or residues (in the cases of cellulosic ethanol from corn kernel fiber and corn stover, as well as cellulosic diesel and heating oil from mill residue). The use of many of the feedstocks currently being used to produce cellulosic biofuel are not expected to cause significant land use changes that might lead to adverse environmental impacts.

Despite these similarities, there are also significant differences between liquid cellulosic biofuels and CNG/LNG derived from biogas. None of the cellulosic biofuel feedstocks expected to be used to produce liquid cellulosic biofuels through 2022 are specifically produced to be used as feedstocks for cellulosic biofuel production. Many of these feedstocks (including agricultural residues, mill residue, and separated municipal solid waste (MSW)) have limited uses in other

⁶¹ From 2015 through 2022 the statutory target for cellulosic biofuel increases by 13.0 billion gallons, from 3.0 billion gallons to 16.0 billion gallons. During this same time period the statutory target for total renewable fuel increases by 15.5 billion gallons, from 20.5 billion gallons to 36.0 billion gallons. Thus, cellulosic biofuel was expected to account for 84% (13.0 billion gallons/15.5 billion gallons) of the total renewable fuel increase.

markets.⁶² Because of this, using these feedstocks to produce liquid cellulosic biofuel is not expected to have significant adverse impacts related to several of the statutory factors, including the conversion of wetlands, ecosystems and wildlife habitat, soil and water quality, the price and supply of agricultural commodities, and food prices. Notwithstanding these benefits, the cost of producing liquid cellulosic biofuel is high. These high costs are generally the result of low yields (e.g., gallons of fuel per ton of feedstocks) and the high capital costs of liquid cellulosic biofuel production facilities. In the near term (through 2022), the production of these fuels is likely to be dependent on relatively high cellulosic RIN prices (in addition to state level programs such as California's low carbon fuel standard (LCFS)) to be economically competitive with petroleum-based fuels.

CNG/LNG derived from biogas, like liquid cellulosic biofuel, is generally produced from waste materials or residues (e.g., through biogas collection from landfills, municipal wastewater treatment facility digesters, agricultural digesters, and separated MSW digesters) and thus is not expected to affect the conversion of wetlands, ecosystems and wildlife habitat, soil and water quality, the price and supply of agricultural commodities, and food prices. However, in contrast to the feedstocks generally used to produce liquid cellulosic biofuels, significant quantities of biogas from these sources are currently used to produce electricity, while smaller quantities are injected into natural gas pipelines. In some situations, such as at larger landfills, CNG/LNG derived from biogas may also be able to be produced at a price comparable to fossil natural gas. Despite this relatively low cost of production, the combination of the high cellulosic biofuel RIN price and the significant volume potential for CNG/LNG derived from biogas used as

⁶² One potential exception is corn kernel fiber. Corn kernel fiber is a component of distillers grains, which is currently sold as animal feed. Depending on the type of animal to which the distillers grain is fed, corn kernel fiber removed from the distillers grain through conversion to cellulosic biofuel may need to be replaced with additional feed.

transportation fuel could have a relatively significant impact (about \$0.01 per gallon) on the price of gasoline and diesel.⁶³

2. Non-Cellulosic Advanced Biofuel

The volume targets established by Congress also anticipated significant growth in advanced biofuel beyond what is needed to satisfy the cellulosic standard. The statutory target for advanced biofuel in 2022 (21 billion gallons) allowed for up to 5 billion gallons of non-cellulosic advanced biofuel to be used towards the advanced biofuel volume target. In practice the vast majority of non-cellulosic advanced biofuel in the RFS program has been biomass-based diesel, with relatively small volumes of sugarcane ethanol and other advanced biofuels. Some of the statutory factors assessed by EPA suggest that the targets for non-cellulosic advanced biofuel established by Congress, or even higher volumes, are still appropriate. Notably, all advanced biofuels have the potential to provide significant GHG reductions as they are required to achieve at least 50 percent GHG reductions relative to the petroleum fuels they displace. Some types of advanced fuels, such as biodiesel and renewable diesel produced from fats, oils, and greases, provide even greater reductions than the 50 percent threshold. This summary focuses on the impacts of advanced biodiesel and renewable diesel.

Advanced biodiesel and renewable diesel together comprise 95 percent or more of the total supply of non-cellulosic advanced biofuel over the last several years, and is expected to supply all of increase in advanced biofuel through 2022. High domestic production capacity and availability of imports indicate that volumes of non-cellulosic advanced biofuel in 2021 and 2022 may meet or even exceed the implied statutory targets. Similarly, the feedstocks used to make advanced biodiesel and renewable diesel (such as soy oil, canola oil, and corn oil, as well as waste oils such as white grease, yellow grease, trap grease, poultry fat, and tallow) currently

⁶³ See Chapter 5.1.2.2 of the DRIA for a further discussion of the expected impact of RINs generated for CNG/LNG derived from biogas on the transportation fuel market.

exist in sufficient quantities globally to supply these increasing volumes. These feedstocks have many existing uses that may require replacement with other suitable substitutes, but there is also potential for ongoing growth in the production of many of these feedstocks. Higher volume requirements for non-cellulosic advanced biofuel may also have energy security benefits, increase domestic employment in the biofuels industry, and increase income for biofuel feedstock producers.

However, some of the factors assessed would support lower volumes of advanced biofuel. For instance, as described in Chapter 9 of the DRIA, the cost of biodiesel and renewable diesel is significantly higher than petroleum-based diesel fuel and is expected to remain so over the next several years. Even if biodiesel and renewable diesel blends are priced similarly to petroleum diesel at the pump after accounting for the relevant Federal and state incentives (including the RIN value), society as a whole nevertheless bears their full costs. Moreover, the fact that sufficient feedstocks exist to produce increasing quantities of advanced biodiesel and renewable diesel does not mean that those feedstocks are readily available or could be diverted to biofuel production without adverse consequences. As described in Chapter 5 of the DRIA, we expect only limited quantities of fats, oils, and greases and distillers corn oil to be available for increased biodiesel and renewable diesel production in future years. We expect that the primary feedstock available to biodiesel and renewable diesel producers in significant quantities through 2022 will be soybean oil and other vegetable oils whose primary markets are for food. Increased demand for soybean oil could lead to diversion of feedstocks from food and other current uses in addition to further incentivizing increased soybean crushing and soybean production. Increased soybean production in the U.S. and abroad in turn could result in greater conversion of wetlands, adverse impacts on ecosystems and wildlife habitat, adverse impacts negative impacts on water quality and supply, and increased prices for agricultural commodities and food prices. We request comment on the impacts of advanced biofuel production on the statutory factors, including impacts on wetlands, ecosystems, and wildlife habitat.

3. Conventional Renewable Fuel

As with non-cellulosic advanced biofuel, some of the statutory factors assessed for conventional renewable fuel favor the implied statutory volume (15 billion gallons) or higher volumes, while other factors favor lower volumes. While conventional renewable fuels are generally required by EISA to achieve 20 percent GHG reductions relative to the petroleum fuels they displace, some conventional biofuel facilities exceed this threshold. Notably, EPA has developed an expedited petition process for ethanol production facilities using more efficient process technologies.⁶⁴ The statute, however, also contains grandfathering provisions exempting any facility that had begun construction on or before December 19, 2007, from this requirement, so not all producers of conventional renewable fuels meet or are required to meet the 20 percent GHG reduction threshold.⁶⁵

The vast majority of conventional renewable fuel that has been supplied to the U.S. is corn ethanol. Domestic production capacity for corn ethanol exceeds 16 billion gallons. Production of corn-ethanol in the U.S. reached a peak of 16.1 billion gallons in 2018.⁶⁶ Higher volumes of conventional renewable fuel could result in more domestic jobs in the biofuels industry. At the same time, there are also significant volumes of palm biodiesel and renewable diesel that are produced internationally that could qualify as conventional renewable fuel under the grandfathering provisions of the RFS program. In the past, small volumes of grandfathered biodiesel and renewable diesel have been supplied to the U.S.⁶⁷

⁶⁴ EPA has developed an “Efficient Producer Petition Process,” which encourages adoption of efficiency improvements in new ethanol facilities by expediting petition review and approval. Existing EPA estimates for corn starch ethanol produced in 2022 using a dry mill process and natural gas fired process heat range from a 42 percent to a 17 percent reduction over baseline gasoline, depending on the technologies used at the production facility.

⁶⁵ See CAA section 211(o)(2)(A)(i).

⁶⁶ Energy Information Administration (EIA) Monthly Energy Review.

⁶⁷ Use of grandfathered biodiesel and renewable diesel reached a maximum of 157 million gallons in 2016. Since 2018 use of grandfathered biodiesel and renewable diesel has been very small (less than 1 million gallons each year). See Chapter 1.6 of the DRIA.

However, some of the analyses we conducted support lower volumes of conventional renewable fuel. As with soy biodiesel, increased corn production in the U.S. could result in greater conversion of wetlands, adverse impacts on ecosystems and wildlife habitat, adverse impacts negative impacts on water quality and supply, and increased prices for agricultural commodities and food prices. Furthermore, constraints on ethanol use may also support lower implied volume requirements for conventional biofuel. The market has not achieved 15 billion gallons of actual use of conventional renewable fuel in any year in which the RFS standards were based on it. This was due to various factors, including limitations on ethanol use above the E10 blendwall, strong export markets for domestically produced ethanol, the effect of exempted small refinery volumes in depressing the effective RFS standards, and use of advanced biodiesel and renewable diesel, buoyed by its tax subsidy and other incentive programs, to meet the implied conventional portion of the total renewable fuel requirement.

While the use of ethanol as E10 has been, and continues to be, economical for refiners and blenders, the use of E10 alone has not been sufficient to achieve the 15 billion gallons of ethanol use due to declining gasoline demand. The RFS program has had limited success in helping to increase the use of higher ethanol blends, and growth in the nationwide average gasoline ethanol concentration has virtually stagnated as the market reached the E10 blendwall. While the use of higher ethanol blends has increased since 2011, that growth has been small compared to prior growth in the use of E10 and in the use of non-ethanol biofuels. We do not anticipate that growth in the use of higher ethanol blends through 2022 will increase rapidly enough to result in significantly greater volumes of ethanol consumption in the U.S., even with the incentives created by the RFS program standards and other governmental efforts such as Department of Agriculture's (USDA's) Blender Infrastructure Program and Higher Blends Infrastructure Incentive Program. Moreover, exporting ethanol to be blended with gasoline abroad has been more profitable in recent years than selling greater volumes of E15 or E85

domestically. We expect these trends in exports to continue given international demand for ethanol.

In addition, total demand for gasoline was lower in 2020 and is expected to remain lower in 2021 and 2022 relative to the volume of gasoline consumed in 2017-2019 according to EIA's May 2021 Short Term Energy Outlook (STEO), which will limit the volume of ethanol used as E10.⁶⁸ Most notably, the COVID-19 pandemic caused a significant fall in gasoline demand and sales of E10 starting in 2020. We would expect, therefore, that even maintaining the implied 15 billion gallon statutory volume target for conventional renewable fuel going forward would require that volumes of biodiesel and renewable diesel, the least costly alternative source, increase to compensate for the reduction in ethanol use.

If biodiesel and/or renewable diesel were able to be supplied in sufficient quantities to enable a conventional renewable fuel requirement at 15 billion gallons to be met despite lower ethanol consumption, there could still be other potentially adverse impacts. We project that much of this biodiesel and renewable diesel would be imported. Further, these fuels could be sourced from grandfathered facilities that may not achieve the desired GHG reductions. If imported biodiesel and renewable diesel were to increase, we would expect either an increase in the use of petroleum fuels from countries that previously used these fuels, or, alternatively, an expansion of palm oil production to produce biodiesel and renewable diesel, likely resulting in additional foreign land being converted to cropland for the production of palm oil. There would likely be both adverse wildlife impacts and higher GHG emissions of such international land use changes that would be associated with a higher implied conventional volume mandate satisfied by grandfathered biodiesel and renewable diesel.

⁶⁸ The May 2021 STEO estimates gasoline consumption of 8.03 million barrels per day (123.5 billion gallons) in 2020, projects 8.70 million barrels per day (133.3 billion gallons) in 2021, and projects 8.92 million barrels per day (136.8 billion gallons) in 2022. The STEO reported gasoline consumption in 2017-2019 at 9.31-9.33 million barrels per day (142.7-143.0 billion gallons) annually.

At the same time, we do not believe that setting volumes such that the implied conventional renewable fuel volume is below the E10 blendwall would be appropriate either. Under such a scenario, imports of biodiesel and renewable diesel to meet the demand provided by the implied conventional renewable fuel volume would cease altogether which would have some benefits for domestic energy independence and may have some environmental benefits as well insofar as those imports are produced from palm oil. However, impacts on domestic ethanol production would be small as E10 would continue to be used regardless. There would most likely be some decrease in the small amounts of higher ethanol blends used, but the use of E10 would be essentially unchanged, and since ethanol blended as E10 dominates the total volume of ethanol consumed, the overall ethanol volume would be minimally affected. Thus, we expect that setting the implied volume for conventional renewable fuel below the E10 blendwall would have little impact on domestic biofuel production or use.

B. Proposed Volumes for 2020

We are proposing to revise previously finalized 2020 total renewable fuel, advanced biofuel, and cellulosic biofuel volumes to equal the volume of such fuels actually used in the U.S. in 2020.⁶⁹ As we discuss in Section VI, we are also proposing to make corresponding adjustments to the percent standards applicable to obligated parties.⁷⁰

Since 2020 has already passed, this rulemaking has no ability to affect actual production, imports, and use of renewable fuel in 2020. The impact of the rule on each of the statutory factors is similarly limited. In contrast, were we to revise the 2020 volumes to be greater than the volume of renewable fuel that was supplied or were we to simply leave the original volumes

⁶⁹ We also call such volumes the volumes that are actually consumed or actually supplied. In this context, we are using the term “supply” distinct from the statutory term “inadequate domestic supply” in CAA section 211(o)(7)(A)(ii).

⁷⁰ As discussed in Section VI, the adjustments to the percentage standards would also include changes to the non-renewable gasoline and diesel volumes to reflect actual 2020 consumption.

from the 2020 final rule in place, we would expect some combination of potentially disruptive outcomes: (1) a reduction in the quantity of carryover RINs; (2) obligated parties carrying deficits into 2021; and/or (3) obligated parties being out of compliance with their RFS obligations.⁷¹ While this approach could have the effect of prospectively increasing demand for renewable fuels in 2022, simply establishing higher volumes for 2022 is expected to have the same effect on renewable fuel producers with a much lower risk of market disruptions that could result from maintaining volume obligations for 2020. As we explain in Section IV.B, we are proposing to revise the 2020 volume obligations to forestall potential disruptions in the fuels market that would impair the ongoing implementation of the RFS program.

We acknowledge that this proposal to reconsider and revise the already finalized 2020 standards will be finalized after the November 30, 2019, statutory deadline for the 2020 standards and can operate only retroactively.⁷² We generally do not think it is appropriate to reconsider and revise previously finalized RFS standards. Nonetheless, we are proposing to do so because critical and unanticipated events have occurred affecting fuels markets and RFS compliance. First, we anticipate a significant and unprecedented shortfall in renewable fuel use in 2020 relative to the volumes that we required in the 2020 final rule. This is largely due to the COVID-19 pandemic, which caused an unforeseen and drastic fall in transportation fuel demand generally and in biofuel demand more specifically.

In general, under the RFS program, a shortfall in gasoline and diesel fuel consumption relative to the projected volumes results in a corresponding decrease in the volume of renewable fuel required. This self-adjusting nature of the program is a function of the fact that the RFS standards are applied as a percentage to an obligated party's gasoline and diesel fuel production; the obligation to acquire RINs for compliance rises and falls along with gasoline and diesel fuel

⁷¹ See Section IV.A for a discussion of carryover RINs.

⁷² 85 FR 7016 (February 6, 2020). In addition, the 2020 BBD volume was established in the 2019 final rule. 83 FR 63704.

production volume. Further, historical deviations between the volumes of gasoline and diesel actually used relative to their projected volumes have been relatively small. As a result, we have historically not adjusted the RFS standards after they have been established to account for updated gasoline and diesel consumption levels. This is consistent with our general policy of not reconsidering and revising previously finalized RFS standards.

However, the situation in 2020 was different. As explained further in Section IV.B, the shortfalls in 2020 were both significantly larger than in any previous year and disproportionately affected gasoline more than diesel fuel. This is important because on average finished gasoline contains more renewable content than finished diesel. The vast majority of gasoline contains at least 10% ethanol, mostly in the form of E10, whereas the average concentration of renewables in diesel falls far short of that. Thus, while the decrease in transportation fuel demand in 2020 proportionally decreased the required renewable fuel volume, the decrease in the demand for renewable fuel was greater given the greater drop in gasoline versus diesel demand.

Further, even with the lesser impact on diesel fuel consumption, we still observed a shortfall in the use of biodiesel and renewable diesel relative to our projections in the 2020 final rule. That is to say, the projections in the 2020 final rule overestimated the use of biodiesel and renewable diesel, even if we adjust those projections by the shortfall in diesel demand.

Second, when we promulgated the 2020 volume requirements, we did so while projecting for the first time that we would be granting a large number of SREs for 2020. The 2020 final rule reallocated the projected exempted volumes onto the remaining obligated parties, thereby significantly increasing the obligations on those parties. As we explain in Section VI.B, there continues to be substantial uncertainty regarding whether we will grant or deny the many SRE petitions for 2020 in the wake of the Tenth Circuit's decision in *RFA* and the Supreme Court's

reversal of one of the bases for the Tenth Circuit’s decision in *HollyFrontier*.⁷³ Among the uncertainties are the impacts of the additional holdings in *RFA* that were not addressed on appeal to the Supreme Court. The significant impact of our earlier projection on the standards and the consequent impact on our SRE policy by the litigation in *RFA* and *HollyFrontier* suggest that reconsideration is warranted.⁷⁴

The decrease in biofuel use, together with the potential impacts of SRE decisions, means that compliance with the original 2020 standards would likely result in a significant drawdown of the number of carryover RINs available for use in 2021, which could negatively impact the functionality of the RIN market that enables the successful implementation of the RFS program. A well-functioning RIN market is foundational for allowing obligated parties to comply with their RFS mandates, particularly for obligated parties that do not themselves produce or blend renewable fuels. As discussed in Section IV.A, the carryover RIN bank is already projected to drop from 3.48 billion RINs in 2019 to 1.85 billion RINs in 2020, following 2019 compliance. We project that the 2020 standards, if unmodified and SREs are not granted, would result in a significant drawdown of the total number of carryover RINs, to a volume (630 million RINs) that would represent less than 4 percent of the proposed 2021 and 2022 total renewable fuel standards.⁷⁵ The number of carryover cellulosic biofuel RINs would also be projected to decrease significantly, as we project that the number of cellulosic carryover RINs would be reduced to just 2.2 million RINs, which is less than 0.5 percent of the proposed 2021 and 2022 cellulosic biofuel volumes. Such a drastic reduction in the carryover RIN bank has the potential to reduce the liquidity of RINs and could negatively impact parties that do not currently have sufficient RINs to meet their 2020 obligation. This could make it difficult for some parties to acquire enough

⁷³ *Renewable Fuels Ass’n v. EPA*, 948 F.3d 1206 (10th Cir. 2020), *rev’d in part sub nom., HollyFrontier Cheyenne Refining, LLC, v. Renewable Fuels Ass’n*, 114 S. Ct. 2172 (2021).

⁷⁴ As noted in Section II.D, we have received petitions seeking reconsideration of the 2020 annual rule under CAA section 307(d)(7)(B).

⁷⁵ See Section VI of “Carryover RIN Bank Calculations for 2020-2022 Proposed Rule,” available in the docket for this action.

RINs to comply with their 2020 RFS obligations, as well as the 2021 and 2022 standards being proposed, and could cause those parties to carry forward deficits or to become non-compliant. This could lead to significant negative impacts on the fuels market and the ongoing implementation of the RFS program, as discussed in Section IV.B.

These considerations also support our decision to retroactively reduce the 2020 volumes to those actually used. In doing so, we are relieving burdens on obligated parties, and in some cases, the potentially onerous burden of non-compliance with the RFS program and the possibility of penalty payments. This approach also ensures sufficient RINs for compliance. It also ensures the continued functioning of the carryover RIN bank, a necessary compliance flexibility for obligated parties. It also protects the ongoing implementation of the RFS program and facilitates the higher volumes proposed for 2022, as we discuss further in Section IV.B.

With regard to lead time, less lead time is needed for obligated parties given that we are reducing the stringency of their obligations, as opposed to increasing the stringency of their obligations. Nonetheless, we are providing significant lead time. We extended the 2020 compliance deadline for obligated parties to January 31, 2022, providing these parties with additional time to acquire RINs,⁷⁶ and have proposed to further extend that deadline in a separate action.⁷⁷ Had we not adjusted the compliance deadline, obligated parties would have needed to demonstrate compliance by March 31, 2021.

We recognize that retroactively adjusting the 2020 standards will disrupt market expectations created by the prior final rule, for instance on the part of biofuel producers who made investments or other parties who transacted biofuels or RINs, based on the higher standards originally finalized. As a general matter, these expectations may not rise to the level of

⁷⁶ 86 FR 17073 (April 1, 2021).

⁷⁷ 86 FR 67419 (November 26, 2021).

reliance interests recognized by the courts.⁷⁸ Even if they do, however, we believe that revising the standards is nonetheless warranted based on the events and factors described above, which likely confounded market expectations in any event.

As explained in Section II.A.2, the statutory deadline for resetting the total renewable fuel volume was in December 2019, or one year after the promulgation of the 2019 final rule. The statutory deadlines for resetting the advanced biofuel and cellulosic biofuel volumes occurred even earlier. Despite being late to meet our statutory obligations, we are proposing to exercise the reset authority for several reasons. First, doing so satisfies our statutory obligation to reset the statutory volumes. Second, we have already notified the public that we intended to exercise the reset authority.⁷⁹ This proposal is a key step in making good on that intent and meeting our statutory obligation. Third, the reset authority also provides EPA broad discretion to modify the renewable fuel volumes and to establish biofuel volume requirements at the volumes actually consumed. Such volumes for advanced biofuel and total renewable fuel could not be established under the cellulosic waiver authority, which was the legal basis for the original 2020 final rule.⁸⁰ Nonetheless, we believe that these are the appropriate volumes for the reasons explained above.

The proposed revised 2020 volumes, along with the original volumes, are shown in Table III.B-1. The proposed revised 2020 percentage standards, along with the original percentage standards, are provided in Section VI.C.

⁷⁸ *Monroe Energy, LLC v. EPA*, 750 F.3d 909, 919-20 (D.C. Cir. 2014).

⁷⁹ See 84 FR 36766 (July 29, 2019).

⁸⁰ The cellulosic waiver authority limits reductions in the statutory total renewable fuel and advanced biofuel volumes to no more than the reduction in the cellulosic biofuel volume. In the 2020 final rule, we exercised the cellulosic waiver to the maximum extent, resulting in an implied conventional renewable fuel volume of 15 billion gallons and an implied non-cellulosic advanced biofuel volume of 4.5 billion gallons. However, the volumes of advanced biofuel and total renewable fuel actually supplied in 2020 fell short of these numbers.

Table III.B-1: Proposed Revised Volume Requirements for 2020 (billion RINs)

Standard	Original	Revised
Cellulosic Biofuel	0.59	0.51
Biomass-Based Diesel	2.43 ^a	2.43 ^a
Advanced Biofuel	5.09	4.63
Total Renewable Fuel	20.09	17.13

Source: EMTS (EPA Moderated Transaction System). See “RIN supply as of 3-22-21”

^a The BBD volume for 2020 is in physical gallons (rather than RINs) and was established in the 2019 final rule (83 FR 63704, December 11, 2018). We are not proposing to revise the 2020 BBD volume in this action.

We request comment on our proposed approach of reconsidering and revising the 2020 RFS volumes from those promulgated in the prior final rule. We also request comment on modifying 2020 volumes to the volumes of renewable fuel actually supplied in 2020. We further request comment on whether we should include the approximately 40 million cellulosic biofuel carryover RINs in the 2020 cellulosic biofuel volume requirement. We discuss this issue in detail in Section IV.A.3.

C. Proposed Volumes for 2021

We are proposing 2021 total renewable fuel, advanced biofuel, and cellulosic biofuel volumes at our projections of the volume of such fuels used in the U.S. this year. This is the same general approach as for 2020, with the difference that we do not yet have complete data for biofuel use in 2021, and therefore we are projecting biofuel use throughout the remainder of 2021.

Given that we are using the same basic approach as for 2020, the rationale for our 2021 volumes is similar to the rationale for our 2020 volumes. Below we present some of the key similarities and also note differences where they exist. As with 2020, due to the expected timing of the finalization of this rule, the ability for the rule to affect renewable fuel production, imports, and use in the U.S. in 2021 is limited. As such, the impact of the rule on each of the statutory factors is similarly limited. Also, as for 2020, we could also set volumes for 2021 that are greater or lesser than the volume of renewable fuel that is actually supplied in 2021, but we

do not believe that doing so would be appropriate for similar reasons. EPA does, however, believe that the RFS program should drive increases in renewable fuel volumes over time. Given that we are setting volumes for 2020-2022 in this rule and the fact that retrospective volumes have limited ability to affect biofuel use, we believe that increases in volume requirements are more appropriate in 2022. That is when this rule applies prospectively and has the potential to affect actual biofuel use. We discuss this relationship between the three years further in Section IV.B.

As with 2020, the 2021 volumes both are late and would operate retroactively. Unlike for 2020, however, we are not modifying previously finalized standards for 2021. The lateness and retroactivity of the 2021 volumes are appropriate for similar reasons as for 2020. We believe that establishing the 2021 volumes at the volumes projected to be used properly balances the statutory goal of increasing renewable fuel use with mitigating burdens on obligated parties. It ensures that the obligated parties should have sufficient RINs to comply. In a separate action, we have proposed to extend the compliance and attest engagement dates for 2021, providing additional lead time, as well as compliance flexibilities for obligated parties including access to carryover RINs and carryforward deficits.⁸¹ In addition, we note that this approach, of setting volumes at those actually used, is consistent with our approach in the 2014 and 2015 standards, which the D.C. Circuit upheld in *ACE*.

As with the 2020 volumes, the 2021 volumes also depend upon a belated exercise of the reset authority. We believe using the reset authority is appropriate for similar reasons as 2020: we are statutorily obligated to reset 2021 volumes, we have previously informed the public that we intended to reset the volumes, and the reset authority gives us discretion to reduce the total renewable fuel volume beyond what we could establish under the cellulosic waiver. There is also an additional reason, which is that the statute indicates that when we reset the volumes, we must

⁸¹ 86 FR 67419 (November 26, 2021).

do so for all remaining years in the statutory volume tables, which extend through 2022. Thus, in resetting the 2020 volumes, we are obligated to reset the 2021 and 2022 volumes.⁸²

The volumes of cellulosic biofuel, advanced biofuel, and total renewable fuel we are proposing for 2021 are shown in Table III.C-1. The biomass-based diesel volume for 2021 was previously established in the 2020 final rule and is included in Table III.C-1 for context. These volumes are based on the projected use of renewable fuels in the U.S., as discussed in greater detail in Chapter 5 of the DRIA.

Table III.C-1: Proposed RFS Volumes for 2021 (billion RINs)

Category	Proposed Volume
Cellulosic Biofuel	0.62
Biomass-Based Diesel	2.43 ^a
Advanced Biofuel	5.20
Total Renewable Fuel	18.52

^a The BBD volume for 2021 is in physical gallons (rather than RINs) and was established in the 2020 final rule (85 FR 7016, February 6, 2020). We are not proposing to revise the 2021 BBD volume in this action.

In the final rule, we intend to consider additional data, including more recent data on renewable fuel production and use, and public comments, and update our projections accordingly. We request comment on both our proposed approach of establishing the RFS volumes for 2021 at the volume of renewable fuel projected to be supplied in 2021, as well as our projections of these volumes. We also request comment on whether or not to include volumes of cellulosic ethanol produced from corn kernel fiber in our projection of cellulosic biofuel production in 2021, as discussed in Chapter 5 of the DRIA.

D. Proposed Volumes for 2022

We are proposing 2022 total renewable fuel, advanced biofuel, and cellulosic biofuel volumes that represent growth compared to historical volumes and compared to the volumes

⁸² See CAA section 211(o)(7)(F) (“the Administrator shall promulgate a rule ... that modifies the applicable volumes set forth in the table concerned for all years following the final year to which the waiver applies”).

proposed for 2020 and 2021. We are proposing a 150 million gallon increase in the 2022 cellulosic biofuel volume over the proposed 2021 volume based on the expected continued growth in biogas use. We are also proposing the full implied statutory volumes for non-cellulosic advanced biofuel (i.e., 5 billion gallons, or 500 million gallons more than the proposed 2021 volume) and conventional renewable fuel (15 billion gallons).⁸³ We anticipate significant growth in the use of non-cellulosic advanced biofuels, especially in advanced renewable diesel.⁸⁴ While we expect that conventional ethanol use will fall short of the implied 15 billion gallon volume in 2022 by roughly 1.2 billion gallons, we project that greater volumes of biodiesel and renewable diesel could be produced and imported to offset this shortfall. We discuss the 2022 BBD volume separately in Section III.D.

The proposed cellulosic biofuel volume for 2022 is equal to the projected available volume of cellulosic biofuel (see Chapter 5.1 of the DRIA). This volume represents the highest volume of cellulosic biofuel we can establish for 2022 given the cellulosic waiver provision, which requires EPA to reduce the statutory cellulosic volume to the projected volume available. While EPA does have the authority to establish a lower cellulosic volume under the reset authority, we do not believe this would be appropriate for 2022, as discussed below.

EPA's approach to the proposed cellulosic biofuel volume for 2022 seeks to realize the potential for GHG benefits associated with increased cellulosic biofuel production despite the relatively high costs (or in the case of CNG/LNG derived from biogas, the relatively high impact on the price of transportation fuel). Thus, while some of the statutory factors (such as the cost to consumers of transportation fuel) may suggest that a volume of cellulosic biofuel lower than the

⁸³ The implied statutory volume for non-cellulosic advanced biofuel in 2022 (5 billion gallons) is the difference between the statutory volumes for advanced biofuel (21 billion gallons) and cellulosic biofuel (16 billion gallons) in 2022. Similarly, the implied statutory volume for conventional renewable fuel in 2022 (15 billion gallons) is the difference between the statutory volumes for total renewable fuel (36 billion gallons) and advanced biofuel (21 billion gallons) in 2022.

⁸⁴ See Chapter 2 of the DRIA.

volume projected to be produced in 2022 would be appropriate, we have determined that these factors are outweighed by other factors (such as climate change).

The proposed advanced biofuel and total renewable fuel volumes strike a balance between numerous competing statutory factors. They reflect the potential for growth in the volume of renewable fuel produced and consumed in the U.S., and the energy security and potential climate change benefits that producing and consuming increasing volumes of qualifying renewable fuels provide. They also take into consideration the potential negative impacts of renewable fuels produced from crops such as corn or soybeans on environmental factors such as the conversion of wetlands, ecosystems, and wildlife habitat, water quality, and water supply.

We acknowledge that the implied conventional renewable fuel volume is higher than the volume of these fuels projected to be consumed in the U.S. in 2022. We believe this may incentivize the continued expansion of the infrastructure necessary to use higher level blends of ethanol, which remains the dominant form of conventional renewable fuel. In recent years, ethanol consumption beyond the E10 blendwall in the U.S. has been limited by infrastructure constraints (as well as other factors) to a volume significantly lower than the volume of ethanol produced in the U.S. and the total production capacity of the U.S. ethanol industry. If these infrastructure constraints are addressed, domestic ethanol consumption and ultimately domestic ethanol production could increase, and this could result in job creation, rural economic development, higher corn prices for farmers, and a greater supply of agricultural commodities. Alternatively, additional volumes of conventional biodiesel and renewable diesel could be supplied in 2022, including renewable fuels that are grandfathered under 40 CFR 80.1403 and are thus not required to meet the minimum 20 percent GHG reduction required for all qualifying renewable fuel. These fuels would most likely be produced in foreign facilities, which may cause

additional environmental impacts and would not provide the same benefits to domestic job creation and rural economic development, but they could still provide energy security benefits.⁸⁵

At the same time, this higher volume requirement means that obligated parties will likely need to look to other sources of renewable fuel beyond corn ethanol to meet their compliance obligations for 2022. While we are proposing the non-cellulosic portion of the advanced biofuel standard at the full implied statutory volume of 5 billion gallons, our assessment of potential supply indicates that some additional volume will likely be used in 2022. This means that if, as expected, the market falls short of the implied volume of conventional renewable fuel in 2022, as has happened in several years in the past, excess volumes of advanced biofuel beyond what is needed to meet the advanced biofuel volume could be available to fulfill some portion of the shortfall. Finally, as discussed for in the context of the proposed volume requirements for 2020 and 2021, there may also be implications of the proposed 2022 volume requirements on the carryover RIN bank. While we are projecting that sufficient renewable diesel, both advanced and conventional, will be available to meet the proposed 2022 volume requirements, there is the potential that the market may fall short, in which case the existence of sufficient carryover RINs in the carryover RIN bank can still enable compliance. Specifically, obligated parties may use carryover RINs to help them comply with the proposed 2022 standards. See Section IV.A for a more detailed discussion of carryover RINs.

We acknowledge that in lieu of maintaining the implied statutory volumes of non-cellulosic advanced biofuel and conventional renewable fuel and relying on higher volumes of advanced biofuel to fulfill an expected shortfall in conventional biofuel, we could instead raise the advanced biofuel requirement and lower the conventional biofuel volume. However, we have chosen not to propose this. We expect that the impact on GHG emissions of the decision not to

⁸⁵ Registered capacity to produce conventional biodiesel and renewable diesel exists at grandfathered facilities. Because grandfathered renewable fuels are not required to meet the GHG reduction thresholds, the GHG impacts of these fuels are highly uncertain.

propose a higher advanced biofuel volume with a corresponding lower implied conventional biofuel volume will be minimal, given that additional volumes of advanced biofuels will likely be used to satisfy the conventional portion of the total renewable fuel requirement. Moreover, we believe that providing incentives for increased ethanol distribution and blending infrastructure through the higher implied volumes of conventional renewable fuel may result in the potential for greater renewable fuel consumption in future years.

We note that this approach of maintaining the statutory implied conventional and non-cellulosic advanced biofuel volumes is inherently consistent with the volumes Congress itself established in EISA. It is also consistent with EPA’s policy in prior years, during which we have never established prospective volume requirements lower than the implied statutory volume targets, with a single exception.⁸⁶ While we have discretion to deviate from this policy, we continue to believe that maintaining the implied statutory volumes strikes the proper balance based upon our consideration of the reset factors.

We also acknowledge that we are already late in resetting the 2022 volumes. We nonetheless believe that this late exercise of our reset authority is appropriate for similar reasons as for 2020 and for 2021. Moreover, the proposed 2022 volumes are also independently justified under our cellulosic waiver authority.

The volumes of cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel we are proposing for 2022 are shown in Table III.D-1. We request comment on these proposed volumes. (The proposed BBD volume for 2022 is also included in Table III.D-1 for context, although we discuss it in Section III.E)

⁸⁶ We prospectively established a volume for conventional renewable fuel for 2016 (14.5 billion gallons) that was lower than the statutory implied volume (15 billion gallons). In doing so, we exercised our “inadequate domestic supply” waiver authority based largely on the limited demand for ethanol in the United States. That decision that was subsequently set aside by the U.S. Court of Appeals for the District of Columbia Circuit in *ACE*, as exceeding our waiver authority.

Table III.D-1: Proposed RFS Volumes for 2022 (billion RINs)

Category	Proposed Volume
Cellulosic Biofuel	0.77
Biomass-Based Diesel	2.76 ^a
Advanced Biofuel	5.77
Total Renewable Fuel	20.77

^a The BBD volume for 2022 is in physical gallons (rather than RINs).

In particular, we request comment on our projection of cellulosic biofuel for 2022. As discussed in greater detail in Chapter 4 of the DRIA, our cellulosic biofuel projections for 2022 do not include any volume of cellulosic ethanol produced from corn kernel fiber from facilities that are not currently registered to generate cellulosic RINs due to outstanding issues. If these technical and regulatory issues are resolved, we project that as much as 210 million additional gallons of cellulosic biofuel could be produced from corn kernel fiber in 2022. Our projections also do not include any volumes that might result from our proposed biointermediate regulations, as we believe the impacts of that proposal will not occur until after 2022. We request comment on whether we should project additional cellulosic biofuel production from corn kernel fiber or biointermediates in 2022, and, if so, the volume we should project.

E. Proposed Biomass-Based Diesel Volume for 2022

As described above, we are proposing an increase of 500 million gallons in the non-cellulosic advanced biofuel volume for 2022. Consistent with this, we are also proposing to increase the BBD volume requirement by the same energy-equivalent amount (330 million physical gallons) to 2.76 billion gallons.

As in recent years, we believe that excess volumes of BBD (above 2.76 billion gallons) will be used in 2022 to satisfy the advanced standard. Historically, the BBD standard has not independently driven the use of BBD in the market. This is due to the nested nature of the standards and the competitiveness of BBD relative to other advanced biofuels. Instead, the advanced biofuel standard, and occasionally the total renewable fuel standard, have driven the

use of BBD in the market. We believe this trend will continue in 2022, and that the 2022 advanced standard, and potentially the total renewable fuel standard, will drive the use of BBD in the market in 2022.

At the same time, we think it is important to maintain space for other advanced biofuels to participate in the RFS program. Although the BBD industry has matured over the past decade, the production of other advanced biofuels continues to be relatively low and uncertain. Maintaining this space for other advanced biofuels can facilitate in the long-term increased commercialization and use of other advanced biofuels, which may have superior environmental benefits and lower costs relative to BBD. Conversely, we do not think increasing the size of this space is necessary for 2022 given that only small quantities of these other advanced biofuels have been used in recent years relative to the space we have already provided.

The proposed BBD volume for 2022 is consistent with our policy in previous annual rules, where we also set the BBD volume consistent with the change, if any, in the advanced volume. In the 2019 final rule, we set the 2020 BBD volume at 2.43 billion gallons. This was an increase from the prior year's BBD volume by the same energy-equivalent amount (330 million physical gallons) as the increase in the 2019 non-cellulosic advanced biofuel volume (500 million ethanol-equivalent gallons). By contrast, in the 2020 final rule, when the 2020 non-cellulosic advanced biofuel volume did not change, we also maintained the 2021 BBD volume at 2.43 billion gallons. In both rules, we preserved a significant space for other advanced biofuels to compete, approximately equal to 850 million RINs (approximately equal to 566 million physical gallons). In reality, only 334 million ethanol-equivalent gallons of other advanced biofuel was consumed in 2020.

We acknowledge that in proposing the 2022 BBD volume in this action, we are proposing a late BBD volume. CAA section 211(o)(2)(B)(ii) provides that EPA shall determine the applicable volume 14 months prior to the year for which the standard will apply. That

deadline has already passed. However, we do anticipate establishing the 2022 BBD standard ahead of the 2022 compliance year. The D.C. Circuit in *ACE* has affirmed EPA’s ability to promulgate late BBD standards as long as those standards are reasonable.⁸⁷ In evaluating the reasonableness of EPA’s standards, the Court suggested that EPA must “consider[] various ways to minimize the hardship caused to obligated parties.”⁸⁸ In this action, we are providing obligated parties with notice of the potential 2022 BBD volume requirement well in advance of the 2022 compliance deadline. Additionally, we are proposing a volume requirement that is consistent with our treatment of the BBD volume requirement in the past, i.e., increasing the BBD volume requirement in accordance with increases in the implied statutory non-cellulosic advanced volume. Further, as in this case of previous annual rules, we continue to believe that it will be the advanced biofuel standard for 2022 that will drive the use of BBD in the market, and thus, the BBD standard we propose to establish is unlikely to result in additional burdens on obligated parties. Finally, we solicit comment on whether we should instead maintain the BBD standard for 2022 at 2.43 billion gallons. This would increase the space allowed for other advanced biofuels, as we are proposing to increase the advanced biofuel volume for 2022 by 500 million gallons over the proposed 2021 volume.

F. Summary of the Proposed Volumes

The proposed volumes for 2020, 2021, and 2022 are summarized in Table III.F-1. We request comment on these volumes (excepting the 2020 and 2021 BBD volumes, which were set in the 2019 and 2020 final rules, respectively), as well as any data or analysis that would support alternative volumes for these years.

⁸⁷ *ACE* at 721.

⁸⁸ *Id.* (quoting *Monroe Energy, LLC v. EPA*, 750 F.3d 909, 920 (D.C. Cir. 2014)).

Table III.F-1: Proposed RFS Volumes for 2020, 2021, and 2022 (billion RINs)

Category	2020	2021	2022
Cellulosic Biofuel	0.51	0.62	0.77
Biomass-Based Diesel ^a	2.43 ^b	2.43 ^c	2.76
Advanced Biofuel	4.63	5.20	5.77
Total Renewable Fuel	17.13	18.52	20.77

^a The BBD volumes are in physical gallons (rather than RINs).

^b The BBD volume for 2020 was established in the 2019 final rule (83 FR 63704, December 11, 2018).

^c The BBD volume for 2021 was established in the 2020 final rule (85 FR 7016, February 6, 2020).

G. Impacts of the Proposed Volumes

As explained in Chapter 2.2 of the DRIA, we have used a baseline of the volumes actually supplied in 2020 to assess the impacts of this proposed rule, and thus the proposed 2020 volumes have no costs or benefits. We therefore focus on the projected impacts of the 2021 and 2022 volumes.⁸⁹ We recognize that there are other possible baselines that could be used as a point of comparison, and that the choice of baseline significantly influences our impact analyses. A potential alternative baseline that might be informative would be the volumes of renewable fuels that would be used each year from 2020-2022 in the absence of RFS obligations. While we have not used this alternative baseline in this rule, Chapter 2.2 of the DRIA contains a brief description of what such a baseline might look like. We request comment on the volumes of renewable fuel and feedstock use that would occur in these years in the absence of the RFS obligations.

For two of the statutory factors (fuel costs and energy security benefits) we were able to quantify and monetize the expected impacts of this proposed rule.⁹⁰ Information and specifics on how fuel costs are calculated are presented in Chapter 9 of the DRIA, while energy security benefits are discussed in Chapter 4 of the DRIA. A summary of the fuel costs and energy security benefits

⁸⁹ The values for both 2021 and 2022 are calculated relative to the actual volumes of renewable fuel used in 2020. The 2022 values therefore reflect the incremental volumes for both 2021 and 2022.

⁹⁰ Due to the uncertainty related to the GHG emission impacts of this proposed rule (discussed in further detail in Chapter 3.2 of the RIA) we have not included a quantified projection of the GHG emission impacts of this proposal. However, to provide perspective regarding the scope of the potential benefits, Chapter 3.2.2 of the RIA illustrates the potential GHG benefits associated with the proposed volumes in this rule using the lifecycle GHG values calculated in the 2010 RFS final rule and other prior actions.

are shown in Table III.G-1 and Table III.G-2. Other factors, such as job creation and the price and supply of agricultural commodities, are quantified but have not been monetized. Further information and the quantified impacts of this proposed rule on these factors can be found in the DRIA. We were not able to quantify many of the impacts of this rulemaking, including impacts on many of the statutory factors such as the environmental impacts and rural economic development.

Table III.G-1: Fuel Costs of the Proposed Volumes (2020 and nominal year dollars, millions)^a

Year	Undiscounted	Discounted	
		Rate: 7%	Rate: 3%
2021	278	278	278
2022			
Excluding Supplemental Volumes	2,158	2,017	2,095
Including Supplemental Volumes	2,302	2,151	2,235

^a These costs represent the costs of producing and using biofuels relative to the petroleum fuels they displace. They do not include other factors, such as the potential impacts on soil and water quality or potential GHG reduction benefits.

Table III.G-2: Energy Security Benefits of the Proposed Volumes (2020 dollars, millions)

Year	Undiscounted	Discounted	
		Rate: 7%	Rate: 3%
2021	64	64	64
2022			
Excluding Supplemental Volumes	151	141	147
Including Supplemental Volumes	162	151	157

Regardless of whether or not we were able to quantify or monetize the impact of this proposed rule on each of the statutory factors, consideration of these factors is still required by the statute. We believe that the proposed standards in this rulemaking are appropriate under our reset authority when we balance all of the relevant factors described throughout this preamble and the DRIA. We request comment generally on how costs and benefits quantified in this proposed rule are calculated and accounted for, as well as methods to quantify and monetize additional statutory factors.

IV. Interactions Between the RFS Annual Volumes

In resetting the volumes, EPA must review the implementation of the program. In conducting this review, we have assessed the carryover RIN bank⁹¹ and carryforward deficits, which are two important compliance mechanisms. Specifically, the RFS regulations contain provisions that allow an obligated party to satisfy their RFS obligations for a given year by using up to 20 percent of RINs generated in the previous year.⁹² Similarly, the RFS regulations also allow an obligated party to carry forward a compliance deficit from one year to the next, provided the party meets their full RFS obligations in the following year.⁹³ These provisions operate such that any excess RINs generated in one year, or any RIN deficits, can impact the market for RINs and renewable fuels in the next year. As such, compliance with the RFS standards for one year is inherently intertwined with compliance for the prior year. This section discusses the projected volume of carryover RINs (net of carryforward deficits) that will be available for use towards compliance with the 2020, 2021, and 2022 RFS obligations. We also evaluate whether we should intentionally set the 2020, 2021, and 2022 volumes at levels that would intentionally reduce the size of the carryover RIN bank, and we propose that this would not be appropriate.

⁹¹ CAA section 211(o)(5) requires that EPA establish a credit program as part of its RFS regulations, and that the credits be valid for obligated parties to show compliance for 12 months as of the date of generation. EPA implemented this requirement through the use of RINs, which are generated for the production of qualifying renewable fuels. Obligated parties can comply by blending renewable fuels themselves, or by purchasing the RINs that represent the renewable fuels from other parties that perform the blending. There are different “D” codes representing the different RFS standards that the various renewable fuels can be used to comply with. (e.g., D3 represents cellulosic biofuel that can be used to comply with the cellulosic biofuel standard.) RINs can be used to demonstrate compliance for the year in which they are generated or the subsequent compliance year. Obligated parties can obtain more RINs than they need in a given compliance year, allowing them to “carry over” these excess RINs for use in the subsequent compliance year, although our regulations limit the use of these carryover RINs to 20 percent of the obligated party’s RVO. For the bank of carryover RINs to be preserved from one year to the next, individual carryover RINs are used for compliance before they expire and are essentially replaced with newer vintage RINs that are then held for use in the next year. For example, vintage 2020 carryover RINs must be used for compliance in 2021, or they will expire. However, vintage 2021 RINs can then be “banked” for use in 2022.

⁹² 40 CFR 80.1427(a)(5).

⁹³ 40 CFR 80.1427(b).

In addition, in reviewing the implementation of the program, we recognize the difference between the ability of retroactive versus prospective volume requirements to affect renewable fuel use. As we explained in Section II, we anticipate that the 2020 and 2021 standards will be largely retrospective, while the 2022 standards will be prospective. In this section, we explain that we do not expect the retroactive 2020 and 2021 standards to significantly affect renewable fuel use in 2020 and 2021, respectively, but we do expect the prospective 2022 standards to significantly affect renewable fuel use in 2022. Given this dynamic, we generally believe that higher renewable fuel volumes should occur in 2022 as opposed to 2020 or 2021.⁹⁴

A. Treatment of Carryover RINs

Consistent with our approach in recent annual rules, we have also considered the availability and role of carryover RINs in setting the volume requirements for 2020, 2021, and 2022. In general, we have authority to consider the size of the carryover RIN bank in deciding whether and to what extent to exercise any of our discretionary waiver authorities.⁹⁵ EPA's approach to the consideration of carryover RINs in exercising our cellulosic waiver authority was affirmed in *Monroe Energy* and *ACE*.⁹⁶

As noted in past RFS annual rules, carryover RINs are a foundational element of the design and implementation of the RFS program.⁹⁷ A bank of carryover RINs is extremely important in providing a liquid and well-functioning RIN market upon which success of the entire program depends, and in providing obligated parties compliance flexibility in the face of

⁹⁴ We further discuss our review of the implementation of the program throughout the preamble and DRIA, especially in Chapter 1 of the DRIA.

⁹⁵ These discretionary waiver authorities include the reset and set authorities, CAA section 211(o)(7)(F) and 211(o)(2)(B)(ii) (both of which allow EPA to establish RFS volumes based upon a "review of the implementation of the program"), discretionary portion of the cellulosic waiver authority, CAA section 211(o)(7)(D)(i) ("the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement"), the general waiver authority, CAA section 211(o)(7)(A) ("The Administrator ... may waive the requirements"), and the BBD waiver authority with regard to the extent of the reduction in the BBD volume, CAA section 211(o)(7)(E)(ii) ("the Administrator ... shall issue an order to reduce ... the quantity of biomass-based diesel ... by an appropriate quantity").

⁹⁶ *Monroe Energy v. EPA*, 750 F.3d 909 (D.C. Cir. 2014); *ACE*, 864 F.3d at 713.

⁹⁷ See, e.g., 72 FR 23904 (May 1, 2007).

substantial uncertainties in the transportation fuel marketplace.⁹⁸ Carryover RINs enable parties “long” on RINs to trade them to those “short” on RINs instead of forcing all obligated parties to comply through physical blending. Carryover RINs also provide flexibility in the face of a variety of unforeseeable circumstances that could limit the availability of RINs and reduce spikes in compliance costs, including weather-related damage to renewable fuel feedstocks and other circumstances potentially affecting the production and distribution of renewable fuel.

Just as the economy as a whole is able to function efficiently when individuals and businesses prudently plan for unforeseen events by maintaining inventories and reserve money accounts, we believe that the RFS program is able to function when sufficient carryover RINs are held in reserve for potential use by the RIN holders themselves, or for possible sale to others that may not have established their own carryover RIN reserves. Were there to be too few RINs in reserve, then even minor disruptions causing shortfalls in renewable fuel production or distribution, or higher than expected transportation fuel demand (requiring greater volumes of renewable fuel to comply with the percentage standards that apply to all volumes of transportation fuel, including the unexpected volumes) could result in deficits and/or noncompliance by parties without RIN reserves. Because carryover RINs are individually and unequally held by market participants, a small RIN bank may negatively impact the RIN market, even where the market overall could satisfy the standards. Consequently, were market disruptions to occur with an insufficient carryover RIN bank, it could force the need for a new waiver of the standards, undermining the market certainty so critical to the RFS program. For all of these reasons, the collective carryover RIN bank provides a necessary programmatic buffer that both facilitates individual compliance, provides for smooth overall functioning of the program to the benefit of all market participants, and is consistent with the statutory provision allowing for the generation and use of credits. We anticipate that the carryover RIN bank will

⁹⁸ See 80 FR 77482-87 (December 14, 2015), 81 FR 89754-55 (December 12, 2016), 82 FR 58493-95 (December 12, 2017), 83 FR 63708-10 (December 11, 2018), 85 FR 7016 (February 6, 2020).

serve this very purpose for compliance with the 2019 standards, when actual biofuel use in that year is expected to have fallen short of the RFS standards.⁹⁹

EPA can also rely on the availability of carryover RINs to support ambitious volumes that may not be able to be met with renewable fuel production and use in that year, and in the context of the 2013 RFS rulemaking we noted that an abundance of carryover RINs available in that year, together with possible increases in renewable fuel production and import, justified maintaining the advanced and total renewable fuel volume requirements for that year at the levels specified in the statute.¹⁰⁰

1. Carryover RIN Bank Size

We project a significant drawdown in the number of carryover RINs as a result of compliance with the 2019 standards. After compliance with the 2019 RFS standards, we project that there will be approximately 1.85 billion total carryover RINs available, a decrease of 1.62 billion RINs from the previous estimate of 3.48 billion total carryover RINs in the 2020 final rule.¹⁰¹ Since we are proposing to set both the 2020 and 2021 volume requirements at the actual volume of renewable fuel produced in those years, we project that 1.85 billion total carryover RINs would be available for compliance with the 2022 standards as well.

However, there remains considerable uncertainty surrounding the ultimate number of carryover RINs that will be available for compliance with the 2020, 2021, and 2022 standards for several reasons, including the possibility of SREs and the fact that compliance with the 2019 standards has not yet occurred for all parties. Furthermore, as discussed in Section V, our proposed response to the remand of the 2016 rulemaking may reduce the total number of

⁹⁹ EPA extended the 2019 compliance deadline for small refineries to November 30, 2021. See 86 FR 17073 (April 1, 2021). We have proposed to further extend that deadline in a separate action (86 FR 67419, November 26, 2021).

¹⁰⁰ 79 FR 49793-95 (August 15, 2013).

¹⁰¹ The calculations performed to estimate the size of the carryover RIN bank can be found in the memorandum, “Carryover RIN Bank Calculations for 2020-2022 Proposed Rule,” available in the docket for this action.

carryover RINs by up to 250 million RINs in 2022 (and up to another 250 million RINs in 2023). Finally, we note that there have been enforcement actions in past years that have resulted in the retirement of carryover RINs to make up for the generation and use of invalid RINs and/or the failure to retire RINs for exported renewable fuel. Future enforcement actions could have similar results and require that obligated parties or renewable fuel exporters settle past enforcement-related obligations in addition to complying with the annual standards. In light of these uncertainties, the net result could be a total carryover RIN bank larger or smaller than 1.85 billion RINs.

2. EPA's Decision Regarding the Treatment of Carryover RINs

We evaluated the volume of carryover RINs projected to be available and considered whether we should intentionally draw down the carryover RIN bank in setting the 2020, 2021, and 2022 volume requirements. We do not believe that would be appropriate. As described above, the current bank of carryover RINs provides an important and necessary programmatic and cost spike buffer that will both facilitate individual compliance and provide for smooth overall functioning of the program. We believe that a balanced consideration of the possible role of carryover RINs in achieving the statutory volumes for cellulosic biofuel, advanced biofuel, and total renewable fuel, versus maintaining an adequate bank of carryover RINs for important programmatic functions, is appropriate when EPA exercises its discretion under its statutory authorities. Furthermore, as noted earlier, after compliance with the 2019 standards, we project that there will be a significant drawdown in the number of carryover RINs. The advanced biofuel and total renewable fuel standards we are proposing for 2022, moreover, are significantly higher than the volume of renewable fuel used in previous years, as well as the volume of renewable fuel expected to be used in 2020 and 2021. As we explain further in Sections III and V, it may be challenging for the market to satisfy the 2022 annual standards and the 2022 supplemental standard entirely with renewable fuel use in 2022. Given this, the projected shortfall in RIN

generation in 2019, and the uneven holding of carryover RINs among obligated parties, we expect that further increasing the standards with the intent to draw down the carryover RIN bank would lead to significant deficit carryovers and potential non-compliance by some obligated parties that own relatively few or no carryover RINs. We do not believe this is an appropriate outcome. Therefore, consistent with the approach we have taken in previous annual rules, we are not proposing to set the 2020, 2021, and 2022 volume requirements at levels that would intentionally draw down in the bank of carryover RINs.

As noted above, it is possible the size of the RIN bank may be different than our projection. Regardless, however, we do not believe an intentional drawdown of the carryover RIN bank would be appropriate for many of the reasons stated above. The carryover RIN bank would continue to be an important compliance flexibility for obligated parties. Moreover, the standards we are proposing for 2022, along with the 2022 supplemental standard, are forward leaning and if the projected growth in renewable fuel volumes do not materialize would lead to a drawdown of the carryover RIN bank.

3. Consideration of Cellulosic Carryover RINs

In comments on the 2020 proposed rule and supplemental proposal, several parties suggested that EPA prospectively establish the cellulosic biofuel volume at the volume projected to be supplied plus the volume of available carryover RINs from the prior year.¹⁰² That is, these parties argued that EPA should set the cellulosic biofuel volume at a level that would intentionally eliminate the entire cellulosic carryover RIN bank. Because EPA established volumes solely under the cellulosic waiver authority that year, those parties focused their arguments on a legal interpretation of that provision, asserting that it required or allowed EPA to

¹⁰² For example, see comments from the Coalition for Renewable Natural Gas (EPA-HQ-OAR-2019-0136-0723) and AJW and Iogen (EPA-HQ-OAR-2019-0136-0467).

include, in its projection of the available volume, cellulosic carryover RINs that are projected to be available for compliance.

Section 211(o)(7)(D)(i) of the CAA requires EPA to set the applicable volume of cellulosic biofuel at the “projected volume available during [the] calendar year.” EPA has consistently interpreted the statutory phrase “projected volume available” to refer to the volume of qualifying cellulosic biofuel projected to be produced or imported and available for use as transportation fuel in the U.S. in that year. This is equivalent to the projected number of cellulosic RINs generated in the year that are available for obligated parties to use for compliance. Since we first exercised the cellulosic waiver authority in the 2010 annual rule, we have never included carryover cellulosic RINs in this projection.

Parties that requested that EPA include carryover RINs in our projection of the available volume of cellulosic biofuel generally argued that despite the continued rapid growth in cellulosic biofuel volumes, excess carryover cellulosic RINs in 2018 and 2019 resulted in low cellulosic RIN prices, which in turn may have negatively affected investment in cellulosic biofuel production. They further claimed that by including carryover RINs in the projected volume available, EPA would ensure that there was a strong market for cellulosic biofuel and cellulosic biofuel RINs in years when cellulosic biofuel production exceeded the number of cellulosic biofuel RINs needed by obligated parties for compliance. Commenters stated that this increased market certainty would result in increased investment in cellulosic biofuel production and ultimately increased cellulosic biofuel production. One commenter suggested that in conjunction with adding projected carryover RINs to the projected production volume of cellulosic biofuel when establishing the cellulosic biofuel volume, EPA could also subtract any

projected deficits to account for years when cellulosic biofuel production falls short of EPA's projected production volume.¹⁰³

In our response to these comments in the 2020 final rule,¹⁰⁴ we disagreed with parties who claimed that the statutory language of the cellulosic waiver authority requires EPA to include carryover RINs in establishing the required volume of cellulosic biofuel. The statutory term "projected volume available" does not directly address the topic of carryover RINs. Indeed, the cellulosic waiver provision, CAA section 211(o)(7)(D)(i), does not mention carryover RINs at all, or otherwise refer to the statutory basis for such RINs, CAA section 211(o)(5). Thus, we believe there are multiple reasonable interpretations of this ambiguous statutory provision, including both the interpretation put forward by the stakeholders as well as the interpretation adopted by EPA in previous years.

We further stated that the interpretation EPA adopted in previous years struck an appropriate balance between the interests of the cellulosic producers, those obligated to purchase and use cellulosic biofuels and cellulosic biofuel RINs, and consumers; and best ensured the ongoing smooth implementation of the RFS program.¹⁰⁵ Finally, since the 2020 proposed rule did not raise the possibility of including cellulosic carryover RINs in the projected volume available, we did not think it would be appropriate to make such a change without first giving all stakeholders an opportunity to comment.

We are now providing stakeholders notice and opportunity for comment in this proposal on whether to include cellulosic carryover RINs as part of the projected volume available. With respect to the volumes in this rule, were we to include cellulosic carryover RINs, it would increase the 2020 cellulosic biofuel volume by 40 million gallons over the currently proposed

¹⁰³ See comment from AJW and Iogen (Docket Item No. EPA-HQ-OAR-2019-0136-0467).

¹⁰⁴ See Section 3.3 of the Response to Comments document for the 2020 final rule (EPA-420-R-19-018, December 2019).

¹⁰⁵ See *Chevron USA, Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984).

volume.¹⁰⁶ It would not affect the 2021 and 2022 cellulosic biofuel volumes, since we are establishing the cellulosic biofuel volumes based on actual supply for 2020 and 2021, and therefore at this time we do not project that excess RINs will be generated for carryover into 2021 or 2022.¹⁰⁷

While we acknowledge that some aspects of the cellulosic category (such as the cellulosic waiver authority and the cellulosic waiver credits)¹⁰⁸ are unique, at this time we believe the benefits of carryover RINs, discussed in Section IV.A, also apply to cellulosic carryover RINs. Adding carryover RINs to the volume projected to be produced would effectively guarantee that the demand for these RINs was always equal to the overall market supply and would likely result in cellulosic RIN prices at or near the price of an advanced biofuel RIN plus the price of a cellulosic waiver credit in future years. While raising prices would increase revenue for cellulosic biofuel producers, it may also increase the price of cellulosic biofuel. These higher prices would be passed on to consumers, who ultimately bear these costs.

We also note that the legal arguments made by the previous commenters, while still relevant, are less so in the context of this rulemaking. The prior comments focused on an interpretation of the cellulosic waiver authority. In this rulemaking, however, we are concurrently exercising both our cellulosic waiver and reset authorities. Under the reset authority, we have broad discretion to establish volumes, including cellulosic biofuel volumes lower than the volume required under the cellulosic waiver. Thus, regardless of whether the prior commenters are correct about EPA's legal authority under the cellulosic waiver, we have legal

¹⁰⁶ The calculations performed to estimate the number of cellulosic carryover RINs can be found in the memorandum, "Carryover RIN Bank Calculations for 2020-2022 Proposed Rule," available in the docket for this action.

¹⁰⁷ We acknowledge of course that our projections of the available volume of cellulosic biofuel are inherently uncertain, and that there may be more or fewer cellulosic RINs generated in 2020 and 2021 than what we project. However, at the time of this rule, we have done our best to take neutral aim at accuracy of the projected volume available.

¹⁰⁸ Cellulosic waiver credits may be purchased from EPA by obligated parties in years when EPA uses the cellulosic waiver authority to reduce the statutory volumes of cellulosic biofuel. Regulations related to cellulosic waiver credits can be found in 40 CFR 80.1456.

authority under reset to establish volumes at actual supply, excluding any carryover RINs. At the same time, however, the cellulosic waiver authority establishes the ceiling for cellulosic biofuel volumes. If we agree with the commenters that the cellulosic waiver mandates or allows volumes at supply plus carryover RINs, then we may establish cellulosic biofuel volumes up to that level. Thus, although the legal framework has changed somewhat since the comments were submitted, their arguments remain relevant, and EPA is soliciting comment on this issue.

B. Ability for the RFS Volumes to Impact Renewable Fuel Supply

In developing the proposed volume requirements, we considered the timing of this action and its ability to impact renewable fuel production, imports, and use. Since only prospective requirements have a significant chance of affecting actual renewable fuel use, we are proposing to require higher volumes for 2022. Imposing higher volumes for 2020 or 2021, in contrast, would have no effect on demand for fuels in those years. By contrast, retroactively requiring volumes higher than what the market has actually supplied could create market disruption and thus interfere with program implementation without advancing program goals. Setting 2020 and 2021 volumes at those actually supplied reflects the fact that we are acting retroactively, while in requiring higher volumes for 2022 we are setting prospective obligations.

With respect to 2020, that year has already passed, so our retroactive revision of the RFS volumes cannot affect the production or use of renewable fuels in 2020 or consequently the statutory reset factors (e.g., the impacts of the use of renewable fuels on cost, the environment, and so forth). Any actual market effects will be felt after the rule is promulgated and mediated through the carryover RIN bank.

With respect to 2021, there will not be sufficient time for the market to respond to the volumes that we finalize for 2021. The market may also respond in a more limited fashion to this proposed rule. Regardless, any impact on the production, import, and use of renewable fuel in

2021 is likely to be limited, and therefore the ability for this rule to affect the statutory factors is likewise limited.

The situation for 2022, however, is different. The RFS standards for 2022 will be in place throughout 2022 and should be able to affect market decisions for renewable fuel production, import, and use in 2022, albeit still within the bounds of the lead time available. Similarly, the ability for this action to affect the statutory factors in 2022 will be significantly greater than in 2021 or 2020. Thus, we believe that increased renewable fuel requirements should be imposed in 2022, when this rule has a much greater chance of actually increasing renewable fuel use and production, as opposed to 2020 or 2021.

Conversely, there are also disadvantages to requiring higher volumes for 2020 and 2021 retroactively, or similarly, to maintaining the 2020 standards in the original final rule. Notably, such higher volumes would cause some combination of a drawdown of the carryover RIN bank, carryforward deficits, or non-compliance by obligated parties. While we have previously found an intentional drawdown of the carryover RIN bank to be appropriate in one case, we do not think that this is appropriate in this situation for reasons we describe below. We also do not think that intentionally relying on or effectively compelling carryforward deficits or intentionally causing non-compliance is generally appropriate.

Given the drastic shortfall in renewable fuel use relative to what we projected in the 2020 final rule as discussed in Section III.B, compliance with the original 2020 standards would likely result in a significant drawdown in the number of carryover RINs available for use in 2021 and 2022. As discussed in Section IV.A.1, we currently project that as a result of compliance with the 2019 RFS standards, the number of carryover RINs available for compliance with the 2020 standards will be approximately 1.85 billion RINs, a considerable drop from the 3.48 billion total carryover RINs we projected in the 2020 final rule. We expect that as a result of revising the 2020 standards to equal the actual volume of renewable fuels consumed, the number of carryover

RINs available for compliance with the 2021 and 2022 standards will remain at 1.85 billion RINs. Were we not to modify the 2020 standards, we anticipate that the total number of carryover RINs available for compliance with the 2021 and 2022 standards would decrease dramatically to 630 million RINs, or less than 4 percent of the proposed 2021 and 2022 total renewable fuel standards.¹⁰⁹ This would be the lowest quantity of carryover RINs available since EPA began projecting the size of the carryover RIN bank in 2013, and the relatively small carryover RIN bank could increase the risk of disruptions in the RIN trading market. A number of obligated parties would also likely have to carry deficits into 2022, fail to comply with the 2021 total renewable fuel standard if they had already carried a deficit forward from 2020, or similarly fail to comply with the 2022 total renewable fuel standard.¹¹⁰

If these compliance difficulties occur, we believe that the harms would not just be felt by directly affected obligated parties but also extend to the entire fuels market and the RFS program. Notably, if insufficient RINs are available to obligated parties to meet their compliance obligations, that could negatively impact the regulatory and market certainty critical to the investments needed to increase renewable fuel volumes in 2022 and into the future. This could in turn diminish the expected future rate of production of renewable fuels, impair the development of infrastructure to distribute and use increased volumes of such fuels, and reduce the expected energy security, job creation, and rural economic benefits associated with higher renewable fuel use and production. Reduced business certainty could also deter the commercialization of novel advanced biofuels, which have the potential for lower costs and superior environmental benefits.

Retroactively reducing the 2020 volumes mitigates these concerns. Specifically, our proposal to reduce the 2020 volumes to those actually supplied preserves an estimated carryover

¹⁰⁹ The calculations performed to project the number of carryover RINs that would be available if we did not revise the 2020 standards can be found in the memorandum, “Carryover RIN Bank Calculations for 2020-2022 Proposed Rule,” available in the docket for this action.

¹¹⁰ The regulations at 40 CFR 80.1427(b) allows obligated parties to only carry forward a deficit if they did not carry forward a deficit from the previous calendar year; thus, an obligated party that carries forward a deficit from 2020 into 2021 may not carry forward a deficit from 2021 into 2022.

RIN bank of 1.85 billion RINs for use in 2021 and establishing the 2021 volumes at those actually supplied preserves the same estimated carryover RIN bank for compliance with the relatively aggressive 2022 standards.

We note lesser reductions to 2020 or 2021 would give rise to the same concerns. The magnitude of those concerns would depend on how high the resulting volumes are. We think that some of these concerns, moreover, would remain even were we to make offsetting reductions to the 2022 volumes (e.g., were we to increase the proposed 2021 volumes by 500 million gallons and decrease the proposed 2022 volumes by the same amount). In that case, even though the aggregate incentive for renewable fuels across all three years might remain the same, retroactively requiring compliance for past years would be more likely to lead more RIN bank drawdowns, carryforward deficits, and non-compliance, and less likely to lead to actual increases in renewable fuel use and production.

In sum, in proposing the 2020, 2021, and 2022 volumes, we recognize the interconnected nature of the RFS annual volume requirements. We believe that the volume should reflect both a desire to provide the necessary incentives for significant growth in renewable fuel production and use and our obligation to consider and mitigate the burdens on obligated parties associated with a retroactive rulemaking. In general, this indicates that required growth in renewable fuel use should occur prospectively in 2022, as opposed to retroactively in 2020 and 2021. We request comment on how EPA should consider the carryover RIN bank in establishing RFS volume obligations.

V. Response to *ACE* Remand

In addition to proposing the applicable volume requirements and percentage standards for 2020, 2021, and 2022, in this rulemaking we are also proposing to address the remand of the

2014-2016 annual rule¹¹¹ by the U.S. Court of Appeals for the D.C. Circuit in *ACE*.¹¹² In the 2020 proposal, we proposed to address the D.C. Circuit's remand by retaining the original 2016 total renewable fuel standard.¹¹³ We received many comments both in support of and against this approach.¹¹⁴ In the 2020 final rule, we deferred taking action in response to the remand.¹¹⁵ We now believe that we should address the remand through supplemental renewable fuel volume requirements totaling 500 million gallons spread over two years. We are proposing a supplemental renewable fuel obligation of 250 million gallons to be applied in 2022 coupled with the intention of proposing an additional 250 million gallon supplemental standard in a subsequent action for 2023. We propose to establish the supplemental total renewable fuel volume requirement and the corresponding percentage standard for 2022 in this rulemaking. This section describes the relevant aspects of the 2014-2016 annual rule, the court's decision, EPA's responsibilities following the court's remand, and our proposed approach.

A. Reevaluating the 2014-2016 Annual Rule

1. The 2016 Renewable Fuel Standard

On December 14, 2015, we promulgated a rulemaking establishing the volume requirements and percentage standards for 2014, 2015, and 2016.¹¹⁶ In establishing those standards for 2016, we utilized the cellulosic waiver authority under CAA section 211(o)(7)(D) to lower the cellulosic biofuel, advanced biofuel, and total renewable fuel volume requirements, and the general waiver authority under CAA section 211(o)(7)(A) to lower total renewable fuel by an additional increment.¹¹⁷

¹¹¹ 80 FR 77420 (December 14, 2015).

¹¹² 864 F.3d 691 (2017).

¹¹³ 84 FR 36762 (July 29, 2019).

¹¹⁴ See Docket No. EPA-HQ-OAR-2019-0136.

¹¹⁵ 85 FR 7016 (February 6, 2020).

¹¹⁶ 80 FR 77420. The rule also established BBD volumes for 2017.

¹¹⁷ 80 FR 77439.

As an initial step, under CAA section 211(o)(7)(D), we lowered the cellulosic biofuel volume requirement by 4.02 billion gallons, to the projected production of cellulosic biofuel for 2016, as required by the statute.¹¹⁸ Using that same authority, we then elected to reduce the advanced biofuel and total renewable fuel volumes. We did not reduce the advanced biofuel volume requirement by the full 4.02 billion gallons that was permitted under this authority, but rather by a lesser 3.64 billion gallons that resulted in an advanced biofuel volume requirement that was “reasonably attainable.”¹¹⁹ This allowed some advanced biofuel to “backfill” for the shortfall in cellulosic biofuel. We then reduced the total renewable fuel volume by an amount equivalent to the reduction in advanced biofuel in accordance with our longstanding interpretation that when making reductions to advanced biofuel and total renewable fuel under CAA section 211(o)(7)(D), the best reading of the statute is to reduce them both by the same amount.¹²⁰

As a second step, under CAA section 211(o)(7)(A), under a finding of inadequate domestic supply, we further lowered the total renewable fuel standard by 500 million gallons for 2016.¹²¹ In assessing “inadequate domestic supply,” we considered the availability of renewable fuel to consumers. Based on such demand-side considerations, we made the additional 500 million gallon reduction in the total renewable fuel requirement.

The 2016 total renewable fuel standard was challenged in court. In an opinion issued on July 28, 2017, the D.C. Circuit vacated our use of the general waiver authority under a finding of inadequate domestic supply to reduce the 2016 total renewable fuel standard, the second step of setting the 2016 total renewable fuel standard.¹²² The court in *ACE* held that we had improperly focused on supply of renewable fuel to consumers, and that the statute instead requires a

¹¹⁸ See 80 FR 77499.

¹¹⁹ 80 FR 77427.

¹²⁰ *Id.*

¹²¹ 80 FR 77444.

¹²² *ACE*, 864 F.3d 691.

“supply-side” assessment of the volumes of renewable fuel that can be supplied to refiners, blenders, and importers.¹²³ Other components of our interpretation of “inadequate domestic supply” were either upheld by the court in *ACE* (e.g., EPA need not consider carryover RINs as a “supply source of renewable fuel for purposes of determining the supply of renewable fuel in a given year”) or were not challenged (e.g., our consideration of biofuel imports as part of the domestic supply). Our use of the cellulosic waiver authority to provide the initial reduction in total renewable fuel was also upheld by the court. In establishing volume requirements for subsequent years, EPA has applied the court’s holding and not proposed to reduce volumes under a finding of inadequate domestic supply.¹²⁴

2. Agency Responsibility

The court in *ACE* upheld our volume requirements for advanced biofuel, BBD, and cellulosic biofuel; there is, therefore, no need for the agency to adjust those 2016 final volume requirements, or to take further action with regard to these standards in light of the court’s decision. The court also upheld EPA’s use of the cellulosic waiver authority to reduce the 2016 total renewable fuel volume requirement. The court only vacated our decision to further reduce that requirement under the “inadequate domestic supply” waiver authority, remanding this issue to the Agency for further consideration consistent with the court’s opinion.¹²⁵ Our obligation is thus to reevaluate the 2016 total renewable fuel volume requirement in accordance with the court’s decision.

¹²³ *Id.* at 696.

¹²⁴ We note that the precedential effect of the *ACE* decision has governed subsequent RFS annual rules. Compare, e.g., 82 FR 34229 & n.82 (July 21, 2017) (2018 annual rule proposal, issued prior to *ACE*) (soliciting comment on whether it would be appropriate to exercise the inadequate domestic supply waiver authority based on the maximum reasonably achievable volume” of renewable fuel, which incorporates demand-side considerations), with 82 FR 46177 (Oct. 4, 2017) (2018 annual rule availability of supplemental information and request for comment, issued after *ACE*) (recognizing, under *ACE*, that EPA may not consider demand-side constraints in determining inadequate domestic supply).

¹²⁵ *Id.* at 703.

B. Consideration of Approaches for Responding to the ACE Remand

As discussed in the previous section, we waived 500 million gallons of total renewable fuel volume associated with the 2016 volume requirements. In 2017, after the compliance year had passed, and after obligated parties had complied with those requirements, we received the *ACE* court's decision rejecting our use of the general waiver authority under a finding of inadequate domestic supply to reduce volumes as being beyond our statutory authority, and remanded the rulemaking action back to EPA. In this action, we propose to address the court's remand through a supplemental standard of 250 million gallons of total renewable fuel in 2022, with the intent of proposing an additional supplemental volume of 250 million gallons of renewable fuel to be required in 2023 in a subsequent action. As the court invalidated only the 500 million gallon total renewable fuel reduction, we therefore would limit our response to the remand to only the 2016 total renewable fuel standard and the corresponding 500 million gallon reduction stemming from our use of the general waiver authority. As the total renewable fuel volume is the outermost standard in the nested renewable fuel standards, this approach would not affect the other standards.

1. Proposed Response to the ACE Remand

We are proposing to address the *ACE* decision by applying a supplemental standard of 250 million gallons in 2022 with the intention of proposing an additional 250-million-gallon supplemental standard in a subsequent action for 2023. Under this approach, the original 2016 standard for total renewable fuel would remain unchanged and the compliance demonstrations that obligated parties made for it would likewise remain in place. A supplemental standard would thus avoid the difficulties associated with reopening 2016 compliance, as discussed below. This proposed supplemental standard would have the same practical effect as increasing the 2022 total renewable fuel volume requirement by 250 million gallons, as compliance would be demonstrated using the same RINs as used for the 2022 standard. The percentage standard for

the supplemental standard would be calculated the same way as the 2022 percentage standards (i.e., using the same gasoline and diesel projections), such that the supplemental standard would be additive to the 2022 total renewable fuel percentage standard. The proposed approach would provide a meaningful remedy in response to the court's vacatur and remand in *ACE* and would effectuate the Congressionally determined renewable fuel volume for 2016, modified only by the proper exercise of EPA's waiver authorities, as upheld by the court in *ACE*. It is with emphasis on these considerations that we are proposing a different approach from the one proposed in the 2020 proposal.¹²⁶

We propose to treat such a supplemental standard as a supplement to the 2022 standards, rather than as a supplement to standards for 2016, which has passed. In order to comply with any supplemental standard, obligated parties would need to retire available RINs; it is thus logical to require the retirement of available RINs in the marketplace at the time of compliance with this supplemental standard. As discussed below, there are insufficient 2015 and 2016 RINs currently available to meet a supplemental 2016 standard, and additional 2015 or 2016 RINs cannot be generated. By applying the supplemental standard to 2022 instead of 2016, RINs generated in 2021 and 2022 could be used to comply with the 2022 supplemental standard.

In applying the supplemental standard to 2022, we would treat the supplemental standards like a 2022 standard in all respects. That is, producers and importers of gasoline and diesel that are subject to the 2022 standards would also be subject to the supplemental standard. The applicable deadlines for attest engagements and compliance demonstrations that apply to the 2022 standards would also apply to the supplemental standard. The gasoline and diesel volumes used by obligated parties to calculate their obligation would be their 2022 gasoline and diesel

¹²⁶ See *FCC v. Fox*, 556 U.S. 502 (2009), acknowledging an agency's ability to change policy direction.

production or importation. Additionally, obligated parties could use 2021 RINs for up to 20 percent of their 2022 supplemental standard.

As described more fully in Section III, the proposed volume requirements for 2022 are forward leaning, requiring a growth in renewable fuel volumes that we believe is achievable. We also believe that compliance with the 2022 supplemental standard in addition to the proposed standards for 2022 is feasible. If it cannot be fully met through the supply of additional renewable fuel volumes in 2022, it could be met through a drawdown of the carryover RIN bank.¹²⁷ After compliance with the 2019 standards, the carryover RIN bank is expected to consist of approximately 1.85 billion total carryover RINs for compliance in 2022 as discussed in Section IV.A.¹²⁸ We acknowledge that the size of the carryover RIN bank may change by the time this action is finalized. However, given the projected size of the carryover RIN bank, we think it is very likely that more than 250 million total carryover RINs will be available in 2022 for compliance with the supplemental standard, enabling the market to meet the supplemental standard entirely with carryover RINs, if necessary.

We believe that the potential drawdown of the carryover RIN bank by 250 million RINs is appropriate. As we stated in the 2020 final rule, “[t]he current bank of carryover RINs provides an important and necessary programmatic and cost spike buffer that will both facilitate individual compliance and provide for smooth overall functioning of the program.”¹²⁹ As discussed in Section IV.A, we continue to believe that a significant carryover RIN bank is fundamental to the functionality and success of the RFS program. Therefore, we are reluctant to take potentially counterproductive actions which would force any significant drawdown of its volume. However, we believe that the important programmatic benefits of the carryover RIN

¹²⁷ See Section IV.A for a discussion of carryover RINs.

¹²⁸ The calculations performed to estimate the number of carryover RINs currently available can be found in the memorandum, “Carryover RIN Bank Calculations for 2020-2022 Proposed Rule,” available in the docket for this action.

¹²⁹ 85 FR 7020–22 (February 6, 2020).

bank would be preserved even if the market were to satisfy the supplemental standard purely by drawing down the carryover RIN bank. It is important to note that we would only be reducing the carryover RIN bank by up to 250 million RINs per year due to the phased-in nature of our response.

By phasing in the 500 million gallons of total renewable fuel associated with the *ACE* remand through the implementation of two supplemental standards over two compliance years we believe we can maintain the functionality of the carryover RIN bank and lessen both the disruption to the market and the burden on obligated parties. Imposing two 250 million gallon standards in two compliance years, as opposed to one 500 million gallon supplemental standard in a single compliance year, provides additional notice for both obligated parties and the renewable fuel industry about the additional volume requirements and lessens the additional requirements for each compliance year. This could increase the likelihood that the volumes are met with additional renewable fuel use and, in turn, lessen the likelihood that the carryover RIN bank be drawn down.

In summary, we are proposing to implement a 250 million gallon supplemental volume requirement in 2022 and intend to propose an additional 250 million gallon supplemental volume requirement in 2023, totaling 500 million gallons, that represent the reduction in the 2016 total renewable fuel volume improperly waived under the general waiver authority. This approach would address our obligation to respond to the *ACE* remand while accounting for the unique timing of imposing a 2016 requirement in 2022. Importantly, because there are insufficient 2015 and 2016 RINs to satisfy a supplemental standard, this approach would allow obligated parties to comply with the 2022 supplemental standard using 2021 and 2022 RINs. We seek comment on this approach of applying a supplemental standard for 2022 associated with the *ACE* remand on top of the proposed standards for 2022.

2. Reopening 2016 Compliance

In the alternative, we considered an approach where EPA could have obligated parties comply with a modified 2016 total renewable fuel standard that requires an additional 500 million gallons of renewable fuel relative to the 2016 standard promulgated in 2015. However, we have determined that such an approach would be impractical if not infeasible to implement. Under our current regulations, only 2015 and 2016 RINs can be used to demonstrate compliance with the 2016 standard.¹³⁰ There are far fewer 2015 and 2016 RINs available today (i.e., RINs that are valid but have not already been retired to comply with the 2015, 2016, or 2017 standards) than would be needed to comply with a supplemental standard commensurate with our exercise of the general waiver authority for 2016 (i.e., 500 million gallons).¹³¹ Additionally, the few 2015 and 2016 RINs available are unevenly held among obligated parties; because of the small number of RINs, any parties that held excess 2015 and 2016 RINs could attempt to sell them at a high price, creating dysfunction within the RIN market. These high prices would create a burden on obligated parties without providing any incentive for additional renewable fuel use in 2016 since that year has already passed. Because this approach would result in some parties being in noncompliance, we do not consider this a viable option to respond to the court's remand.

As we have stated in the past, we believe the burdens associated with altering the 2016 standard are high.¹³² To illustrate the burdens associated with such an approach, we considered the steps that would be required to implement a revised 2016 standard. First, we would need to rescind the 2016 standard and promulgate a new 2016 standard. Next, we would need to return all of the RINs used for compliance to the original owners. Once those RINs were unretired (a

¹³⁰ 40 CFR 80.1427(a).

¹³¹ RINs have a 2-year lifespan. Based on EMTS data, 29 million 2016 RINs are still being held in obligated party accounts. Although these RINs still show up in the database as "available," it is likely that many of these RINs are not actually valid. This simply means that these RINs have not been retired by obligated parties as the compliance year has passed and they are expired.

¹³² 84 FR 36762, 36788 (July 29, 2019).

process that could take several months), trading of those RINs could resume for a designated amount of time before retirements would again be required to demonstrate compliance.

Obligated parties could then attempt to comply with a new, higher standard that includes an adjustment to the required total renewable fuel volume to address the *ACE* decision. However, simply unretiring 2016 RINs would not result in sufficient RINs for compliance with the higher standard. Furthermore, because the suite of obligated parties is no longer the same as it was in 2016, with some companies no longer in business, the distribution of unretired RINs could be perceived as unfair as well as uneven, highlighting the complexity of attempting to go back in time.

To remedy the insufficient 2016 RINs used for compliance with the 2016 standard, we also considered an approach where 2016 RINs used for compliance with the 2017 standards could be unretired and used for compliance with the increased 2016 standard, but this would essentially also reopen 2017 compliance, with cascading impacts on each subsequent year's compliance. Reopening compliance would impose a significant burden on both obligated parties and EPA as described above. Moreover, stakeholders have expressed strong desires for consistent compliance requirements on an annual basis. Having compliance demonstrations for the prior year complete before requiring compliance with the subsequent year is considered essential to allow obligated parties to properly account for the vintage of the various RINs in their holdings as they develop their compliance strategies and avoid having RINs expire. Therefore, we do not find that it would be appropriate or reasonable to reopen compliance with the 2016 total renewable fuel standard.

Aside from the paucity of available 2015 and 2016 RINs, applying a supplemental standard to the 2016 compliance year would require us to consider whether the obligated gasoline and diesel volumes used in the calculation of the percentage standards would be derived from the projected volumes used in the rulemaking that established the 2016 standards, or

instead the actual obligated gasoline and diesel volumes in 2016. Of these two choices, using the actual obligated gasoline and diesel volumes would more accurately result in the full volume of the adjustment being realized through the retirement of RINs.¹³³ However, using the actual obligated gasoline and diesel volumes for the supplemental standard would make it inconsistent with the other 2016 standards, and call into question whether the other percentage standards should also be revised to account for actual obligated 2016 gasoline and diesel volumes and compliance revised for all obligated parties. We do not believe that it would be appropriate to revise the other 2016 percentage standards when only the total renewable fuel standard is at issue under the *ACE* remand. Applying the supplemental standard to 2022 and 2023 would avoid this issue.

C. Demonstrating Compliance with the 2022 Supplemental Standard

We intend to prescribe formats and procedures as specified in 40 CFR 80.1451(j) for how obligated parties would demonstrate compliance with the 2022 supplemental standard that simplifies the process in this unique circumstance.¹³⁴ Although the proposed 2022 supplemental standard would be a regulatory requirement separate from and in addition to the 2022 total renewable fuel standard, we intend that obligated parties would submit a single annual compliance report for both the 2022 annual standards and the supplemental standard. Under this intended approach, obligated parties would only report a single number for their total renewable fuel obligation in the 2022 annual compliance report.¹³⁵ Obligated parties would also only need

¹³³ The projected 2016 non-renewable gasoline volume and diesel volume used in the rulemaking that set the 2016 standards was 179.33 billion gallons. According to EIA's May 2021 STEO, the actual non-renewable gasoline and diesel consumption volume in 2016 was 179.16 billion gallons.

¹³⁴ We note that we are not proposing to change the reporting regulations at 40 CFR 80.1451(a) as we do not believe that regulatory changes are needed to accommodate annual compliance demonstration for the proposed 2022 supplemental standard. Any comments suggesting changes to such reporting regulations will be considered outside the scope of this rulemaking.

¹³⁵ Obligated parties demonstrate annual compliance by following the reporting instructions entitled, "Instructions for RFS0304: RFS Annual Compliance Report" (RFS0304 report). A copy of these reporting instructions is available in the docket of this action. Under our intended approach, obligated parties would combine the 2022 total renewable fuel standard with the 2022 supplemental standard in "Field 18" of the RFS0304 report. This combined value would then be multiplied by the obligated gasoline and diesel fuel volume reported as specified in reporting instructions for "Field 20" of the RFS0304 report.

to submit a single annual attest engagement report for the 2022 compliance period that covers both the 2022 annual standards and 2022 supplemental standard.¹³⁶ If we set a 2023 supplemental standard as intended, we would intend to use the same approach for annual compliance demonstrations for both the 2022 and 2023 compliance periods.

To assist obligated parties with this unique compliance situation, we intend to issue guidance with instructions on how to calculate and report the values to be submitted in the 2022 compliance reports.

D. Authority and Consideration of the Benefits and Burdens

In establishing the 2016 total renewable fuel standard, EPA waived the required volume of total renewable fuel by 500 million gallons using the inadequate domestic supply general waiver authority. The use of that waiver authority was vacated by the court in *ACE* and the rule was remanded to the EPA. In order to remedy our improper use of the inadequate domestic supply general waiver authority, we find that it is appropriate to treat our authority to propose a supplemental volume requirement at this time as the same authority used to establish the 2016 total renewable fuel volume requirement – CAA section 211(o)(3)(B)(i), which requires EPA to establish percentage standard requirements by November 30 of the year prior to which the standards will apply and to “ensure” that the volume requirements “are met.” EPA exercised this authority for the 2016 standards once already. However, the effect of the *ACE* vacatur is that there remain 500 million gallons of total renewable fuel from the 2016 statutory volumes that were not included under the original exercise of EPA's authority under CAA section 211(o)(3)(B)(i). Therefore, EPA has retained authority for the remaining 500 million gallons. EPA also has authority under CAA section 211(o)(2)(A)(i). The D.C. Circuit in *NPRA* noted

¹³⁶ The deadline for the attest engagement reports for the 2022 compliance period is June 1, 2023, and we are not proposing to modify that deadline in this action.

Congress granted EPA authority to “‘ensure’ that ‘at least’ the set volumes were used each year.”¹³⁷

We have sought to mitigate the burdens of a late or retroactive standard in part by proposing a supplemental standard that applies for the 2022 compliance year. Although we established a total renewable fuel standard in 2016, we did so while erroneously waiving 500 million gallons of total renewable fuel through the use of our general waiver authority. In this action, we are proposing to begin to remedy that error by requiring an additional 250 million gallon total renewable fuel volume requirement in the 2022 compliance year.¹³⁸

As noted in Section II.C, in *ACE* and two prior cases, the court upheld EPA’s authority to issue late renewable fuel standards, even those applied retroactively, so long as EPA’s approach is reasonable.¹³⁹ EPA must consider and mitigate the burdens on obligated parties associated with a delayed rulemaking.¹⁴⁰ When imposing a late or retroactive standard, we must balance the burden on obligated parties of a retroactive standard with the broader goal of the RFS program to increase renewable fuel use.¹⁴¹ The approach we are proposing in this action would implement a late standard as described in these cases. Obligated parties made their RIN acquisition decisions in 2016 based on the standards as established in 2016 and they may have made different decisions had we not reduced the 2016 total renewable fuel standard by 500 million gallons using the general waiver authority. Were EPA to create a supplemental standard for 2016 designed to address the use of the general waiver authority in 2016, we would be imposing a wholly retroactive standard on obligated parties, but because the proposed supplemental standard will be complied with in the 2022 compliance year, it will instead be a late standard. Pursuant to

¹³⁷ *NPRA*, 630 F.3d at 157.

¹³⁸ As noted earlier, we intend to propose an additional supplemental volume of 250 million gallon for 2023 in a subsequent action.

¹³⁹ See *ACE*, 864 F.3d at 718; *Monroe Energy, LLC v. EPA*, 750 F.3d at 920; *NPRA*, 630 F.3d at 154-58.

¹⁴⁰ *ACE*, 864 F.3d at 718.

¹⁴¹ *NPRA*, 630 F.3d at 154-58.

the court’s direction, we have carefully considered the benefits and burdens of our approach and considered and mitigated the burdens to obligated parties caused by the lateness.

We acknowledge that in the 2020 proposal, we stated that a supplemental standard would “impose a significant burden on obligated parties” that would “be unduly burdensome and inappropriate” and lack “any corresponding benefit as any additional standard cannot result in additional renewable fuel use in 2016.”¹⁴² We seek comment on whether the approach described in this document mitigates the associated burdens or even entirely avoids most of the burdens we described in the 2020 proposal (such as those associated with allowing only 2015 and 2016 RINs to be used for compliance). We seek comment on whether the current size of the carryover RIN bank is sufficient to mitigate the burden on obligated parties from a supplemental standard as well as whether the proposal to spread the 500 million gallon volume over two compliance years also mitigates the burdens on the carryover RIN bank. In short, we seek comment on whether this approach would reasonably balance the benefits and burdens and whether it would provide appropriate and meaningful relief in response to the *ACE* remand.

We believe that the approach proposed in this action, if finalized, could provide benefits that outweigh potential burdens. Consistent with the 2016 renewable fuel volume established by Congress, our proposed and intended supplemental standards for 2022 and 2023, respectively, are in total equivalent to the volume of total renewable fuel that we inappropriately waived for the 2016 total renewable fuel standard. The use of these supplemental standards phased across two compliance years would provide a meaningful remedy to the D.C. Circuit’s vacatur of EPA’s use of the general waiver authority and remand of the 2016 rule in *ACE*.

We have carefully considered and designed this approach to mitigate any burdens on obligated parties. We have considered the availability of RINs to satisfy this additional

¹⁴² 84 FR 36788 (July 29, 2019).

requirement. We are soliciting comment on the feasibility of the proposed 250-million-gallon supplemental standard in 2022. As explained earlier, there are insufficient 2015 and 2016 RINs available to satisfy the proposed 250-million-gallon standard.¹⁴³ Instead, we are proposing a supplemental volume requirement to the 2022 standards that will apply in the 2022 compliance year. Doing so would allow 2021 and 2022 RINs to be used for compliance with the 2022 supplemental standard, in keeping with existing RFS regulations. We believe there would be a sufficient number of 2021 and 2022 RINs to satisfy the 2022 supplemental standard. Although it is possible that the supplemental standard could be met through additional renewable fuel production, we generally believe that requiring volumes for the 2022 annual standards beyond those we are proposing in this action results in increasing difficulty in the standards being met through additional renewable fuel production. We believe that potential drawdown of the carryover RIN bank as a result of compliance with the proposed supplemental standard would be appropriate in light of the projected size of the carryover RIN bank in 2022 and the desire to provide a meaningful remedy to the court's remand and the Congressional intent evidenced by the statutory 2016 total renewable fuel standard.

Second, we provide significant lead-time for obligated parties by proposing this standard as supplemental to the 2022 standard: more than one year prior to the 2022 compliance deadline.

Third, we are proposing multiple mechanisms to mitigate the potential compliance burden. One step is to designate that the response to the *ACE* remand will be a supplement to the 2022 standards. This approach would not only allow the use of 2021 and 2022 RINs for compliance with the 2022 standard, as described earlier, but it would also avoid the need for obligated parties to revise their 2016 (and potentially 2017, 2018, 2019, etc.) compliance demonstrations, which would be a burdensome and time-consuming process. In addition, our

¹⁴³ As also described above, it is likely that some amount of the existing carryover RIN bank represents RINs generated but not used for compliance in 2016, as the market over complied with the total renewable fuel standard that year.

proposal allows obligated parties to satisfy both the 2022 standards and the supplement in a single set of compliance and attest engagement demonstrations. We are also proposing to extend the same compliance flexibility options already available for the 2022 standards to the 2022 supplemental standard, including allowing the use of carryover RINs and deficit carry forward subject to the conditions of 40 CFR 80.1427(b)(1). We also intend to spread out the 500-million-gallon obligation over two compliance years as described above. This will allow obligated parties and renewable fuel producers additional lead time to meet the standard because the RFS program will phase in the requirement, thus providing about a year of lead time for the second 250 million gallon requirement.

Lastly, we have carefully considered alternatives, including retaining the 2016 total renewable fuel volume as described in the 2020 proposal. We seek comment on this alternative, as well as on any other alternative approaches for addressing the *ACE* remand.

On balance, we find that requiring an additional 500 million gallons of total renewable fuel to be complied with through two supplemental standards spread over two years would be an appropriate response to the court's vacatur and remand of our use of the general waiver authority to waive the 2016 total renewable fuel standard by 500 million gallons. We seek comment on this approach.

E. Calculating a Supplemental Percentage Standard for 2022

The formulas in 40 CFR 80.1405(c) for calculating the applicable percentage standards were designed explicitly to associate a percentage standard for a particular year with the volume requirement for that same year. The formulas are not designed to address the approach that we are proposing in this action, namely the use of a 2016 volume requirement to calculate a 2022 percentage standard. Nonetheless, we can apply the same general approach to calculating a supplemental percentage standard for 2022.

If this proposed approach to the *ACE* remand is finalized, the numerator in the formula in 40 CFR 80.1405(c) would be the supplemental volume of 250 million gallons of total renewable fuel. The values in the denominator would remain the same as those used to calculate the proposed 2022 percentage standards in Section VI.C, which can be found in Table VI.C-1.¹⁴⁴ As described in Section VI.C, the resulting supplemental renewable fuel standard percentage standard for a 250 million gallon volume requirement in 2022 would be 0.14 – 0.15 percent, depending on the projection of exempt volume of gasoline and diesel.

The proposed supplemental standard for 2022 would be a requirement for obligated parties separate from and in addition to the 2022 standard for total renewable fuel. The two percentage standards would be listed separately in the regulations at 40 CFR 80.1405(a), but in practice obligated parties would demonstrate compliance with both at the same time. Thus, the two percentage standards would effectively be additive (e.g., 11.76% + 0.14% = 11.90%, using the low end of the proposed percentage standards in Section VI.C).

VI. Percentage Standards

EPA implements the nationally applicable volume requirements by establishing percent standards that apply to obligated parties. The obligated parties are producers and importers of gasoline and diesel, as defined by 40 CFR 80.1406(a). The standards are expressed as volume percentages. Each obligated party multiplies the percentage standards by sum of all non-renewable gasoline and diesel they produce or import to determine their Renewable Volume Obligations (RVOs).¹⁴⁵ The RVOs are the number of RINs that the obligated party is responsible for procuring to demonstrate compliance with the RFS rule for that year. Since there are four

¹⁴⁴ We intend to update the values in the denominator, such as the projected gasoline and diesel volumes, based on updated information available at the time of the final rule.

¹⁴⁵ 40 CFR 80.1407.

separate standards under the RFS program, there are likewise four separate RVOs applicable to each obligated party for each year.

The volumes used to determine the proposed 2020, 2021, and 2022 percentage standards are described in Section III and are shown in Table VI-1.

Table VI-1: Volumes for Use in Determining the Proposed Applicable Percentage Standards (billion RINs)

Standard	2020	2021	2022
Cellulosic Biofuel	0.51	0.62	0.77
Biomass-Based Diesel ^a	2.43 ^b	2.43 ^c	2.76
Advanced Biofuel	4.63	5.20	5.77
Total Renewable Fuel	17.13	18.52	20.77
Supplemental Standard	n/a	n/a	0.25

^a The BBD volumes are in physical gallons (rather than RINs).

^b The BBD volume requirement for 2020 was established in the 2019 standards rulemaking (83 FR 63704, December 11, 2018).

^c The BBD volume requirement for 2021 was established in the 2020 standards rulemaking (85 FR 7016, February 6, 2020).

A. Calculation of Percentage Standards

The formulas used to calculate the percentage standards applicable to obligated parties are provided in 40 CFR 80.1405(c). The formulas apply to the estimates of the volumes of non-renewable gasoline and diesel fuel, for both highway and nonroad uses, which are projected to be used in the year in which the standards will apply. EIA provides projected gasoline and diesel volumes, but these include projections of ethanol and biomass-based diesel used in transportation fuel. Since the percentage standards apply only to the non-renewable gasoline and diesel, the volumes of renewable fuel are subtracted out of the EIA projections of gasoline and diesel. In addition, transportation fuels other than gasoline or diesel, such as natural gas, propane, and electricity from fossil fuels, are not currently subject to the standards, and volumes of such fuels are not used in calculating the annual percentage standards or obligated parties' RVOs.

As specified in the 2010 RFS2 final rule,¹⁴⁶ the percentage standards are based on energy-equivalent gallons of renewable fuel, with the cellulosic biofuel, advanced biofuel, and total renewable fuel standards based on ethanol equivalence and the BBD standard based on biodiesel equivalence. However, all RIN generation is based on ethanol-equivalence. To effectuate this difference between BBD and the other three standards, the formula used to calculate the percent standard for BBD in 40 CFR 80.1405 includes a factor of 1.5 to convert physical volumes of BBD into ethanol-equivalent volumes. However, as discussed more fully in Section VII.A, based on updated data regarding BBD use, we are proposing to change this factor from 1.5 to 1.55.

B. Small Refineries and Small Refiners

In CAA section 211(o)(9), Congress exempted small refineries from RFS compliance temporarily through December 31, 2010. Congress also provided that small refineries could receive an extension of the exemption beyond 2010 based either on the results of a required Department of Energy (DOE) study or in response to individual small refinery petitions demonstrating “disproportionate economic hardship.” CAA section 211(o)(9)(B)(i).

In the 2020 final rule, EPA revised certain definitions in the percentage standards formulae at 40 CFR 80.1405(c) to account for a projection of the total exempted volume of gasoline and diesel produced at small refineries, including for those exemptions granted after the final rule. In this proposed action, we are applying these revised definitions to calculate the projected exemptions for 2020, 2021, and 2022 and proposing a range of values. On the low end, we are proposing that the exempted volume is zero; on the high end, we are proposing to project the volume using the same methodology used in the 2020 final rule and updating values with more recent data.

¹⁴⁶ See 75 FR 14670 (March 26, 2010).

The low end of the range of applicable percentage standards would be based on the fact that on January 24, 2020, the United States Court of Appeals for the Tenth Circuit ruled in *RFA* that EPA's grant of three individual SREs exceeded our statutory authority.¹⁴⁷ The court vacated EPA's actions under multiple bases. First, under the Tenth Circuit's reading of the CAA, a small refinery is eligible for relief only if it has received a continuous exemption from the RFS program since the initial blanket exemption through 2010.¹⁴⁸ The Supreme Court subsequently reversed the Tenth Circuit's decision in part on this basis.

However, the Tenth Circuit also vacated EPA's actions for two other reasons: EPA may grant relief only when it finds that the small refinery would suffer disproportionate economic hardship due to compliance with the RFS program, not due to other factors, and EPA had failed to discuss how granting the exemptions was consistent with our findings on RIN cost pass-through.¹⁴⁹ Were EPA to follow these aspects of the *RFA* decision nationwide, we would not anticipate granting any SREs for 2020, 2021, or 2022.

As described in previous actions, our assessment indicates that small refineries fully recover the costs of RFS compliance through higher prices on sales of gasoline and diesel, and that as a result they do not suffer economic hardship due to the RFS.¹⁵⁰ EPA has stated that refineries, including small refineries, are generally able to recover the costs of the RIN in the revenues received for their petroleum products, and that the cost of the RIN is passed through to consumers in the marketplace and does not represent a net cost to obligated parties.¹⁵¹ While some small refineries have contested RIN cost pass-through in their exemption petitions, we

¹⁴⁷ *Renewable Fuels Ass'n v. EPA*, 948 F.3d 1206 (10th Cir. 2020), *rev'd in part sub nom., HollyFrontier Cheyenne Refining, LLC, v. Renewable Fuels Ass'n*, 114 S. Ct. 2172 (2021).

¹⁴⁸ *RFA* at 1244-49.

¹⁴⁹ *RFA* at 1253-54.

¹⁵⁰ "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects," Dallas Burkholder, Office of Transportation and Air Quality, US EPA. May 14, 2015.

¹⁵¹ "Denial of Petitions for Rulemaking to Change the RFS Point of Obligation," EPA-420-R-17-008, EPA-HQ-OAR-2016-0544-0525, (November 22, 2017).

have not credited such arguments in the past. Even when we granted relief in past years, we did so for other reasons.

In addition, because the applicable standards are expressed as a percentage of production basis, the cost of RFS compliance (prior to being recovered in the marketplace through higher sales prices on gasoline and diesel) is proportional to the amount of gasoline and diesel the obligated party produces. In other words, the cost of RFS compliance, per gallon of gasoline and diesel production, is the same for all obligated parties. This same cost applies to all obligated parties and is not disproportionate.

The high end of the proposed range of applicable percentage standards is based on the fact that small refineries subsequently sought review of *RFA* from the U.S. Supreme Court in *HollyFrontier* and received a favorable ruling.¹⁵² At this time we do not yet know how the court's ruling will affect SRE decisions currently before EPA or in the future. The high end of the proposed range therefore reflects a continuation of the intent described in the 2020 final rule to project the volumes of gasoline and diesel associated with future SREs.¹⁵³ Specifically, we are proposing to project the SRE volume for 2020, 2021, and 2022 using the same methodology used in the 2020 final rule, but updating the values using more recent data for 2016–2018 SRE petitions.¹⁵⁴

EPA is also soliciting comment on the revisions we made in the 2020 final rule to the definitions in the percentage standards formulae at 40 CFR 80.1405(c) to account for a projection of the exempted small refinery volume, including for exemptions granted after the final rule. In the 2020 final rule, we justified the revised formulae based in part on our then-

¹⁵² 114 S. Ct. 2172 (2021).

¹⁵³ 85 FR 7049 (February 6, 2020).

¹⁵⁴ We are not adjudicating any SREs in this action, and this action does not prejudice any SRE petition. Rather, this proposal simply reflects our best estimate at this time of the potential range of exempt volumes in 2020, 2021, and 2022.

prospective SRE policy of following DOE's recommendations. As noted above, EPA does not know at this time how *RFA* and *Holly Frontier* will affect our SRE policy going forward, so we are co-proposing a range of exempted small refinery volumes. Since the revisions to the formulae were based in part on our SRE policy, we are also soliciting comment on the revisions, specifically with regard to our decision to account for a projection of exemptions granted after the final rule.

C. Modification of the 2020 Biomass-Based Diesel Percentage Standard

As noted above, the percentage standards implement the nationally applicable volume requirements. Since EPA is proposing to revise the nationally applicable volume requirements for 2020 in this action under our reset authorities, we are proposing to also establish revised percentage standards corresponding to those volumes. With regard to the 2020 and 2021 BBD volumes, EPA is not proposing to revise such volumes, which were established in the 2019 and 2020 final rules, respectively.¹⁵⁵ Nonetheless, EPA is proposing to revise the percent standards for the 2020 volume. We are also proposing to establish the volume requirement and associated percentage standard for 2022 for the nationally applicable volume requirement for BBD using our set authority as described in Section III.E.

With regard to 2021 BBD, EPA did not previously promulgate percentage standards, and thus we do so now for the first time.¹⁵⁶ With regard to 2020 BBD, EPA previously promulgated percentage standards in the 2020 final rule.¹⁵⁷ In this action, EPA is proposing to modify the 2020 BBD percentage standard, even though we are not modifying the 2020 BBD volume requirement that we previously established. Specifically, we are proposing to use the same

¹⁵⁵ 83 FR 63704 (December 11, 2018); 85 FR 7016 (February 6, 2020). In this action, we are not reopening nor seeking comment on the 2020 or 2021 BBD volume requirements.

¹⁵⁶ This action is consistent with past annual rules, which have generally promulgated the BBD percentage standard for the BBD volume set in the prior year's annual rule. This is due to the unique statutory timing applicable to BBD, where EPA must set the volume 14 months in advance but promulgate percentage standards by November 30 of the immediately preceding year. See CAA section 211(o)(2)(B)(ii), (o)(3)(B)(i).

¹⁵⁷ 85 FR 7049 (February 6, 2020).

volume requirement previously promulgated (2.43 billion gallons) but to update the other inputs for calculating the standard (such as the projections of gasoline and diesel consumption and exempted small refinery volumes in 2020), which we term “inputs” in the remainder of this section. We are also proposing to apply the new BBD multiplier of 1.55, which we discuss further in Section VIII.A.

We are proposing to update the inputs because it is logical for all of the 2020 percentage standards to be calculated using the same inputs. This is consistent with EPA’s policy since the beginning of the RFS program, where we have generally calculated all the percentage standards for a given year based on the same inputs. Here, because we are updating the inputs for the other 2020 percentage standards, we also propose to modify the inputs for the 2020 BBD percentage standard. This approach is supported by the nested nature of the standards, where BBD is a subset of the advanced biofuel and total renewable fuel standards, and compliance with all three is accomplished in part by using the same RIN credits. We think it would not be appropriate to use updated inputs for the other standards, while simultaneously using what is now outdated data for the BBD standard alone.

Additionally, the inputs we are proposing to use in this action are quite different from the inputs used in the 2020 final rule. As discussed in Section II.D. and III.B., the projections for gasoline and diesel consumption in 2020 final rule, which were used to establish the BBD standard, are significantly different than the actual gasoline and diesel consumed in 2020. Relative to the 2020 final rule, we are also co-proposing different projections of SREs, as discussed in the prior section.

Finally, we note that our proposed modification to the 2020 BBD percentage standard is not anticipated to have any significant real-world impacts. As set forth in the next section, the proposed modification results in an increase in the BBD percentage standard, which will increase the number of RINs required for compliance with this standard. However, even were we to retain

the original, lower standard, we would nonetheless expect the same number of BBD RINs to be used for 2020 compliance given that BBD is nested within the advanced biofuel category and we are proposing to set the advanced biofuel percentage standard based on actual use of renewable fuels.

D. Proposed Standards

The formulas in 40 CFR 80.1405 for the calculation of the percentage standards require the specification of a total of 14 variables comprising the renewable fuel volume requirements, projected gasoline and diesel demand for all states and territories where the RFS program applies, renewable fuels projected by EIA to be included in the gasoline and diesel demand, and projected gasoline and diesel volumes from exempt small refineries. The values of all the variables used for this proposed rule are shown in Table VI.C-1 for the applicable 2020, 2021, and 2022 standards.¹⁵⁸

¹⁵⁸ See the technical memoranda, “Calculation of proposed % standards for 2020,” “Calculation of proposed % standards for 2021,” and “Calculation of proposed % standards for 2022,” available in the docket for this action.

Table VI.C-1: Volumes for Terms in Calculation of the Proposed Percentage Standards (billion RINs)

Term	Description	2020	2021	2022	2022 Supplemental
RFV _{CB}	Required volume of cellulosic biofuel	0.51	0.62	0.77	0
RFV _{BBD}	Required volume of biomass-based diesel ^a	2.43	2.43	2.76	0
RFV _{AB}	Required volume of advanced biofuel	4.63	5.20	5.77	0
RFV _{RF}	Required volume of renewable fuel	17.13	18.52	20.77	0.25
G	Projected volume of gasoline	123.25	133.06	136.49	136.49
D	Projected volume of diesel	50.49	54.52	56.81	56.81
RG	Projected volume of renewables in gasoline	12.63	13.64	13.98	13.98
RD	Projected volume of renewables in diesel	2.15	2.23	2.66	2.66
GS	Projected volume of gasoline for opt-in areas	0	0	0	0
RGS	Projected volume of renewables in gasoline for opt-in areas	0	0	0	0
DS	Projected volume of diesel for opt-in areas	0	0	0	0
RDS	Projected volume of renewables in diesel for opt-in areas	0	0	0	0
GE	Projected volume of gasoline for exempt small refineries (low)	0.00	0.00	0.00	0.00
	Projected volume of gasoline for exempt small refineries (high)	4.80	4.80	4.80	4.80
DE	Projected volume of diesel for exempt small refineries (low)	0.00	0.00	0.00	0.00
	Projected volume of diesel for exempt small refineries (high)	3.39	3.39	3.39	3.39

^a The BBD volume used in the formula represents physical gallons. The formula contains a proposed 1.55 multiplier to convert this physical volume to ethanol-equivalent volume.

Projected volumes of gasoline and diesel, and the renewable fuels contained within them, were derived from EIA's May 2021 STEO. For the final rule, the 2022 gasoline and diesel projections will be provided by EIA in a letter to EPA that is required under the statute, while the projections for 2020 and 2021 will be derived from the latest version of the STEO, which we anticipate being the October 2021 STEO.¹⁵⁹

¹⁵⁹ To determine the 49-state values for gasoline and diesel, the amount of these fuels used in Alaska is subtracted from the totals provided by EIA because petroleum-based fuels used in Alaska do not incur RFS obligations. The Alaska fractions are determined from the June 26, 2020 EIA State Energy Data System (SEDS), Energy Consumption Estimates. In addition, fuel used in ocean-going vessels is also subtracted from the total because it is excluded from the definition of transportation fuel by the statute. This volume is provided directly by EIA.

Using the volumes shown in Table VI.C-1, we have calculated the proposed percentage standards for 2020, 2021, and 2022 as shown in Table VI.C-2.

Table VI.C-2: Proposed Percentage Standards

	2020			2021		2022	
Standard	Original	Revised Low	Revised High	Low	High	Low	High
Cellulosic Biofuel	0.34%	0.32%	0.34%	0.36%	0.38%	0.44%	0.46%
Biomass-Based Diesel	2.10%	2.37%	2.50%	2.19%	2.30%	2.42%	2.54%
Advanced Biofuel	2.93%	2.91%	3.07%	3.03%	3.18%	3.27%	3.42%
Renewable Fuel	11.56%	10.78%	11.36%	10.79%	11.33%	11.76%	12.33%
Supplemental Standard	n/a	n/a	n/a	n/a	n/a	0.14%	0.15%

The proposed regulations at 40 CFR 80.1405 can only contain one set of percentage standards. Given this constraint, the proposed regulations contain only the percentage standards representing the low end of the range shown in the table above. However, we do not intend this approach to indicate a preference for the low end of the range of proposed percentage standards.

VII. Biointermediates

A. Background

The RFS regulations were designed with the general expectation that renewable biomass would be converted into renewable fuel at a single facility (e.g., a renewable fuel producer purchases corn directly from several farmers in a region, crushes the corn in a mill, and then ferments the corn into ethanol, all at the same facility). The regulations therefore impose requirements on renewable fuel producers to provide EPA with information necessary to verify that their fuel was made with qualifying renewable biomass, through production processes corresponding with approved pathways, and in volumes corresponding to feedstocks used. Such information submissions are necessary for oversight and enforcement, leading to increased integrity and confidence in the program.

Since the RFS2 regulatory program was promulgated in 2010, however, EPA has received a number of inquiries from companies regarding the possible use of renewable biomass that has been substantially pre-processed at one facility to produce a proto-renewable fuel (referred to as a biointermediate) that is subsequently used at a different facility to produce renewable fuel for which RINs would be generated. For example, a number of companies have approached us with the proposed use of woody biomass or separated MSW to produce a biocrude (a pre-processed feedstock that could then be processed into renewable fuel at a crude oil refinery). In response to these requests, EPA has stated that the existing RFS regulations are insufficient to generally allow RINs to be generated in situations wherein multiple facilities are involved in the conversion of renewable biomass feedstocks into renewable fuel.

On November 16, 2016, EPA issued the proposed Renewables Enhancement and Growth Support (REGS) rule that outlined proposed provisions to allow the use of biointermediates to produce qualifying renewable fuels under the RFS program.¹⁶⁰ The proposed REGS rule outlined a comprehensive set of compliance provisions, enforcement provisions, and oversight mechanisms for biointermediates that would have allowed biointermediates into the RFS program while maintaining effective oversight of the production, transfer, and use of biointermediates to make renewable fuels. A public hearing was held in Chicago, IL, on December 16, 2016, and the public comment period ended on January 17, 2017.

Since the proposed REGS rule was issued, EPA has continued to review public comments and other information and to carefully consider how best to develop and implement a program that would allow for the production, transfer, and use of biointermediates to produce renewable fuel under RFS. We continue to believe that the use of biointermediates to produce renewable fuels would be a reasonable and positive development for the future growth in production particularly of cellulosic and advanced biofuels. However, we also continue to

¹⁶⁰ See 81 FR 80828 (November 16, 2016).

believe that the existing regulations are insufficient to allow the use of biointermediates because we are unable to verify the validity of RINs generated in situations where feedstocks are allowed to be processed at multiple facilities, and where partially processed feedstocks, which may appear very similar to renewable fuels themselves, are transferred between parties. The value of these RINs provides considerable incentive for fraudulent activity, and therefore it is important for the integrity of the program that mechanisms be in place to verify their validity.¹⁶¹

After careful consideration of public comments received in response to the proposed biointermediates provisions in the proposed REGS rule and further thought on how best to design and implement a potential biointermediates program, we are proposing biointermediates provisions anew. This proposal re-proposes many aspects of the biointermediate provisions in the proposed REGS rule but also updates several key aspects of that proposal reflecting what we have learned since the original proposal. We discuss what biointermediate provisions we are re-proposing without significant changes from the proposed REGS rule in Section VII.B and the updated revisions in Section VII.C. We also specifically seek comment on a number of issues related to including biointermediates in the RFS program in Section VII.D.

We are reproposing (i.e., proposing anew) the biointermediates provisions here for two main reasons. First, since the publication of the proposed REGS rule, we have reviewed comments received on that proposed rulemaking and have engaged in numerous discussions with parties interested in bringing biointermediates into the RFS program. After almost five years of further consideration, we have identified several areas that we would like to modify or enhance. These changes impact what biointermediates would be allowed under the program and what

¹⁶¹ We note that there has been a long history of RIN fraud in the RFS program. We detail several of the major RIN fraud civil enforcement cases on our website, available at <https://www.epa.gov/enforcement/civil-enforcement-renewable-fuel-standard-program>.

parties that produce, transfer, and use biointermediates would need to do to demonstrate compliance.

Second, we believe it would be useful to provide an additional opportunity for stakeholders interested in biointermediates to comment on the proposed biointermediates provisions more generally. Due to the amount of time that has passed since we proposed the REGS rule, the nature and number of the parties interested in bringing biointermediates into the program has changed. We believe that by providing an additional opportunity for public comment on all aspects of the proposed biointermediates provisions, we would receive additional comments with reasonable suggestions to modify and enhance the proposed biointermediates provision in addition to those we received during the proposed REGS rule comment period. Furthermore, we believe there are specific provisions that we proposed in the REGS rule that would benefit from additional public comment (these are discussed in Section VII.D).

For these reasons, we are proposing all the biointermediates provisions anew and broadly seek comment on these repropounded biointermediate provisions. Commenters that submitted comments on the proposed biointermediates provisions in the REGS rule must resubmit any relevant comments in order for those comments to be considered. As this is a new proposal, we do not intend to respond to comments that were submitted only on the previously proposed biointermediates provisions in the REGS rule. Such comments are outside the scope of this action.

We also seek comment from potential producers of biointermediates on the current status of operations, potential production volumes, timelines for production, and any other information that may help inform EPA as to the expected use of biointermediates to produce renewable fuel both during 2022 and out into the future.

B. Re-proposal of Biointermediates Provisions Previously Proposed in REGS

In this action, we are reproposing certain biointermediate provisions that we previously proposed in the REGS rule. Many of the program design elements for proposed biointermediate provisions remain unchanged from the REGS proposal and are being reproposed here with no modifications other than ministerial changes. The provisions we are reproposing without substantive changes are the following:

- The calculation of lifecycle GHG emissions where biointermediates are used to make renewable fuels and the treatment of pathways for RIN generation where biointermediates are converted into renewable fuels;
- Limiting the production of biointermediates to a single facility;
- The potential liability of biointermediate and renewable fuel producers for violations of the proposed biointermediate provisions;
- Registration, reporting, and recordkeeping requirements for biointermediate producers as well as additional registration, reporting, and recordkeeping requirements for renewable fuel producers that use biointermediates;
- Annual attest engagements for biointermediate producers;
- RFS quality assurance program (QAP) provisions for biointermediate producers and renewable fuel producers that use biointermediates; and
- The treatment of biointermediates produced at foreign facilities.

This preamble incorporates the discussions of each of these elements that are contained in the referenced memo to the docket.¹⁶² We note that because the RFS regulations have undergone several revisions since these elements were previously proposed, we have updated the proposed

¹⁶² Each of these elements are described in greater detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

regulatory language to accommodate these revisions to help ensure consistency between the proposed biointermediate provisions and the rest of the RFS regulations. Additionally, while each of these individual provisions is substantively unchanged from the REGS proposal, how they fit into and function within the larger biointermediates program may be different under our proposed revised program. We discuss broader, substantive changes to the proposed biointermediate provisions in Section VII.C.

As explained above, we are requesting comment on these re-proposed provisions. Comments on these provisions previously submitted to the REGS rulemaking docket will not be considered unless they are resubmitted to the docket for this action (i.e., EPA-HQ-OAR-2021-0324).

C. Changes to the Biointermediates Provisions Previously Proposed in the REGS Rule

In this action, we are also proposing some additions and updates to the biointermediate provisions previously proposed in the REGS rule. Specifically, we are proposing changes to the definition of biointermediate, limits on biointermediate transfers, and mandatory participation in the RFS QAP. We are also proposing changes to the compliance and enforcement provisions, including: new product transfer document requirements for RINs generated from renewable fuels produced from biointermediates; changes to the registration, reporting, recordkeeping, and attest engagement requirements; and provisions for the treatment of invalid RINs generated from biointermediates. These changes are discussed in more detail below.

1. Implementation Dates

We are proposing that the biointermediates provisions will be implemented starting 60 days after the publication of the final rule in the *Federal Register*. In recognition of the time that has passed since EPA first identified the need to revise the regulations to allow the use of

biointermediates, we now intend to put a biointermediates program in place as soon as possible. We believe this proposed implementation date is achievable based on the scope of biointermediates provisions as proposed here. However, we note that depending on the complexity of the final biointermediate provisions, we may need to finalize a later implementation date to provide us enough time to put in place the compliance and oversight mechanisms necessary to effectively oversee the program.

We are seeking specific comments on when biointermediate producers expect to be able to begin production so we can consider the potential impacts of a later implementation date.

2. Definition of Biointermediate

We are proposing a definition of biointermediate that differs from what we proposed in the REGS rule. Previously, we proposed to define a biointermediate as any renewable fuel feedstock material that meets all of the following criteria:

- It was derived from renewable biomass.
- It did not meet the definition of renewable fuel and RINs were not generated for it.
- It was produced at a facility that is registered with EPA, but which is different than the facility at which it is used to produce renewable fuel.
- It was made from the feedstock and would be used to produce the renewable fuel in accordance with the process(es) listed in the approved pathway.
- It was processed in such a way that it is substantially altered from the feedstock listed in the approved pathway.

We pointed out in the proposed REGS rule that our intent was that feedstocks currently listed in an approved pathway or that underwent form changes would not be considered

biointermediates¹⁶³ and excluded form changes from the definition included in the proposed REGS rule. Such form changes included, but were not limited to the following:

- Chopping biomass into small pieces, pressing it, or grinding it into powder.
- Filtering out suspended solids from recycled cooking and trap grease.
- Degumming vegetable oils.
- Drying wet biomass.
- Adding water to biomass to produce a slurry.

We received several public comments suggesting that the proposed definition was too broad and would include existing feedstocks that are currently used in approved pathways. These commenters argued that the additional registration, reporting, and recordkeeping requirements would be unnecessarily burdensome on the production of renewable fuels that already can generate RINs under the current RFS program. Commenters pointed to EPA's stated intent in the proposed REGS rule to avoid inclusion of almost all feedstocks covered by existing pathways either in Table 1 to 40 CFR 80.1426 or an EPA-approved pathway under 40 CFR 80.1416.

Additionally, since the proposed REGS rule, we have developed a better understanding of the potential implementation oversight challenges surrounding the inclusion of certain types of biointermediates. We now believe that the general, one-size-fits-all regulatory framework proposed in the REGS rule would not work in many of the biointermediates situations anticipated now and in the future and that it would be difficult for us to implement appropriately. In some cases it would treat situations as biointermediates when it was not necessary to do so, in other cases it would not treat situations as biointermediates that should be in order to provide proper oversight, and in still other cases it might treat situations as biointermediates but not in the way that our regulations were intended to address. Our additional consideration of

¹⁶³ See 81 FR 80834 (November 16, 2016).

biointermediates since REGS has emphasized that some potential biointermediates require unique provisions for ensuring that qualifying renewable biomass was used to make the biointermediate, ensuring that the biointermediate and the resultant renewable fuel processed at separate facilities continues to fall under an approved pathway, and ensuring that the renewable fuel gets used as transportation fuel, heating oil, or jet fuel. In other cases, we have concerns with the potential generation of invalid or fraudulent RINs especially when a biointermediate either is itself or is similar to a renewable fuel. Historically, when we have brought renewable fuels into the program that required unique considerations or had concerns over the generation of valid RINs, we have either promulgated specific regulatory requirements to address any concerns (e.g., renewable fuel oil) or imposed certain terms and conditions on approved pathways as described at 40 CFR 80.1460(a)(7).

Based on the concerns highlighted in comments and what we have learned about individual biointermediates over the last several years, we no longer believe a broad approach to defining biointermediates would allow us to have sufficient oversight of the program (i.e., to ensure that renewable fuels that generate RINs meet the applicable statutory and regulatory requirements). Each biointermediate has particular compliance and enforcement considerations, including how to track the biointermediate back to renewable biomass, how a biointermediate may be processed with other feedstocks to produce renewable fuel, how a biointermediate fits within existing pathways, and how to demonstrate the cellulosic content of the biointermediate. As such, we now believe it is necessary to design a program that allows us to consider and, if necessary, address these challenges on a biointermediate-by-biointermediate basis. We are thus proposing to specifically define the scope of which biointermediates would be covered by a biointermediates program. In other words, under this proposal we are defining the specific situations in which it would be permitted to process feedstocks into renewable fuels at multiple facilities. Under this proposal, if we do not list a “biointermediate” explicitly in the definition of biointermediate, the “biointermediate” would not be lawful for use in making renewable fuels

under the RFS program. In order for a new biointermediate to be brought into the program, under this proposal, we would amend the regulations again in the future to add the new biointermediate to the list and make any other necessary regulatory changes needed to provide proper oversight for its potentially unique circumstances.

In this action, we are proposing to initially include the following biointermediates: biocrude, free fatty acid (FFA) feedstock, and undenatured ethanol (including ethanol solutions containing less than 95% ethanol). We are also seeking comment on a longer list of additional potential biointermediates that we may choose to include in the final rulemaking depending upon the comments we receive on this proposal. We believe that the three proposed types of biointermediates we are proposing could effectively be accommodated by the updated provisions described in this action. We believe these biointermediates are likely to be available in measurable quantities in the near future and that our proposed biointermediate regulations can ensure proper compliance oversight and enforcement. We have had discussions with a variety of parties interested in producing and using biointermediates since the proposed REGS rule. Some parties making fuels from biocrude, FFA feedstocks, and undenatured ethanol could begin producing volumes as early as 2022. Since these parties are relatively close or already capable of producing renewable fuels from biocrude, FFA feedstock, and undenatured ethanol, and it is relatively clear to us how they will do so and what the compliance oversight issues might be with these biointermediates, we believe that it would be appropriate to allow the use of these biointermediates to produce renewable fuel after we finalize a biointermediates program.

To clearly establish what would be allowed under this proposed biointermediates program, we are also proposing definitions for the specific biointermediates that would initially be included in the program. We are proposing to define undenatured ethanol as ethanol that has

not been denatured per Department of Treasury requirements.¹⁶⁴ We are also proposing specific definitions for biocrude and FFA feedstock. In the future as we revise the regulations to allow new biointermediate into the program, we would then also define those biointermediates. We also note that if we finalize additional biointermediates as part of the biointermediate definition in the final rule, we will also include specific definitions for those additional biointermediates.

The inclusion of FFA feedstock in the proposed definition of biointermediates implies that the existing pathways in Table 1 to 40 CFR 80.1426 satisfy the applicable GHG reduction thresholds in cases where FFA is produced from a feedstock and used to produce a renewable fuel in accordance with a process(es) listed in an approved pathway. We believe this conclusion is supported for the feedstocks listed in Table 1 that FFA biointermediates may be produced from, including biogenic waste fats, oils, and greases (FOG), distillers corn oil and sorghum oil, food wastes, oil crops, and algal oil. As discussed in the 2020 proposed rule, our original approval of pathways that use these feedstocks was based on lifecycle GHG assessments; our basis for potentially allowing FFAs produced from those feedstocks as biointermediates is that we believe the potential additional processing and transport associated with the additional FFA production step would add a limited amount of GHG emissions to the fuel's lifecycle.¹⁶⁵

However, where EPA has not conducted a lifecycle GHG assessment and determined that the original renewable biomass feedstock meets the GHG emission reduction requirements of the CAA, we cannot say that FFAs produced from that feedstock fit within existing pathways.

Therefore, as explained further below, the proposed definition of FFA feedstock includes the following restriction: "FFA feedstock must not include any free fatty acids from the refining of crude palm oil."

¹⁶⁴ See 27 CFR parts 19 through 21. Ethanol does not become a "renewable fuel" under the RFS regulations until it is denatured. The preamble to the RFS2 regulations explains that "ethanol that is valid under RFS2 must be denatured." See 75 FR 14670, 14713 (March 26, 2010).

¹⁶⁵ 84 FR 36801-36803 (July 29, 2019).

The existing pathways using waste FOG feedstocks were approved based on our lifecycle GHG analysis of yellow grease (also known as used cooking oil or “UCO”) for the RFS2 rule, which found, for example, that biodiesel produced from UCO results in a greater than 80% GHG reduction compared to baseline conventional diesel. In addition to UCO, the waste FOG feedstock category includes inedible animal tallow, the FOG components of food wastes and other similar materials that “would otherwise normally be discarded or used for another secondary purpose because they are no longer suitable for their original intended use.”¹⁶⁶ EPA has not determined whether FFA from the refining of crude palm oil (hereafter referred to as palm fatty-acid distillate or “PFAD”) is consistent with and covered by our existing analyses and pathways. In particular, we have not investigated potential existing markets for PFAD and the potential market effects associated with using it as a biofuel feedstock. Although PFAD is a secondary product from crude palm oil refining, we believe that additional analysis is needed to determine whether fuel produced from PFAD would qualify for the applicable GHG reduction thresholds. Our lifecycle analysis of palm oil biodiesel, which has not been finalized through rulemaking, estimated that palm oil-based biodiesel and renewable diesel do not satisfy the 20% GHG reduction for renewable fuel.¹⁶⁷ Those estimates underscore the need to further evaluate the GHG emissions associated with using PFAD as a biofuel feedstock. For these reasons, we are specifying at this time that FFA feedstock does not include FFA from the refining of crude palm oil.

Our proposed approach to defining biointermediates is not intended to affect pre-processing steps for feedstocks in Table 1 that are limited to form changes. We recognize that it has been common practice for some feedstocks listed in Table 1 to 40 CFR 80.1426 or in an approved pathway pursuant to 40 CFR 80.1416 to be physically pre-processed at separate facilities before they are delivered to a renewable fuel production facility and used to produce

¹⁶⁶ 75 FR 14794 (March 26, 2010).

¹⁶⁷ 77 FR 4300 (January 27, 2012).

renewable fuel. We do not intend to disrupt this practice. However, in order to assure that EPA can verify that renewable fuel was made with qualifying renewable biomass, through production processes corresponding with approved pathways, we need to impose limits on the type of pre-processing of qualifying feedstocks that will be allowed without complying with the biointermediate requirements. We intend to balance these interests by allowing the pre-processing of feedstocks listed in approved pathways at facilities other than the renewable fuel production facility, but only if the pre-processing results only in a form change such as chopping, crushing, grinding, pelletizing, filtering, compacting/compression, centrifuging, degumming, dewatering/drying, melting, or the addition of water to produce a slurry.

To implement this approach, we are proposing to prohibit any person from producing a renewable fuel at more than one facility unless the person uses a biointermediate as defined in 40 CFR 80.1401 or uses feedstocks identified in Table 1 to 40 CFR 80.1426 or in an approved pathway pursuant to 40 CFR 80.1416, which were pre-processed at a different facility, and the pre-processing results only in a form change such as chopping, crushing, grinding, pelletizing, filtering, compacting, compression, centrifuging, degumming, dewatering/drying, melting, or the addition of water to produce a slurry. We seek comment on whether we should expand or narrow the types of pre-processing that should be allowed for feedstocks that are not biointermediates at facilities other than the renewable fuel production facilities. Our intent with this proposed addition is to make clear the specific situations where feedstocks will be allowed to be processed at multiple facilities without being subject to the proposed biointermediates provisions. We believe this change would address comments received in the proposed REGS rule that we were overly inclusive of feedstocks already in use in current pathways.

We recognize that the proposed definition of biointermediates does not reflect the full range of potential biointermediates identified to the Agency over the years. As such, we seek comment on whether we should include other potential biointermediates in the proposed

definition for the final rulemaking. We will consider adding these additional biointermediates in the definition in the final rulemaking if the potential biointermediate could appropriately be produced, transferred, and used to make renewable fuel within the proposed provisions for biointermediates in this action. Specifically, we intend to base our consideration of including a potential biointermediate on whether there are adequate controls to limit opportunities to generate fraudulent RINs, whether feedstocks used to produce the biointermediate qualify as renewable biomass, and whether there are any unique considerations for the potential biointermediate that would require further regulatory requirements to ensure that generated RINs are valid. Commenters suggesting that we include a potential biointermediate in the final rulemaking should specifically address these issues in their comments. Furthermore, commenters should provide information describing the type of potential biointermediate, the potential volume of renewable fuel(s) that could be produced from it, and the timeline for its development and ultimate production. Based on consideration of information submitted from commenters on potential biointermediates, we would only intend to finalize those potential biointermediates for which we believe that proposed compliance and oversight provisions can be effectively overseen, have a low likelihood of being susceptible to generation of fraudulent RINs, can be verified as being renewable biomass, and would not require further regulatory provisions.

To aid commenters as to some of the potential biointermediates we will consider including in the final rulemaking, we are providing a memorandum to the docket that lists potential biointermediates that have come to our attention over the past 5 years.¹⁶⁸ The list of potential biointermediates described in the memorandum to the docket is not intended to be exhaustive, and we will consider potential biointermediates not included in the memorandum in the final rule.

¹⁶⁸ See memorandum to the docket entitled, “Potential Biointermediates,” available in the docket for this action.

3. Limits on Biointermediate Transfers

We are proposing that renewable fuel production facilities would be able to receive biointermediates from multiple biointermediate production facilities. However, unlike under the proposed REGS rule provisions, under this new proposal biointermediate production facilities would not be able to send biointermediates to multiple renewable fuel production facilities.¹⁶⁹ We believe this limitation will significantly simplify and improve oversight of RIN generation for renewable fuels produced from biointermediates without unreasonably limiting the production and use of biointermediates. Since the proposed REGS rule, we have become increasingly concerned that, were we to allow biointermediate production facilities to transfer product to multiple renewable fuel production facilities and renewable fuel production facilities to also receive product from multiple biointermediate producers, some parties could take advantage of the increased complexity in tracking relationships and batches to use non-qualifying feedstocks to make renewable fuel or generate fraudulent RINs through double-counting. We believe that without this restriction on biointermediates transfers the use of non-qualifying feedstocks would be more likely to occur and more difficult to detect. In order to effectively audit whether the correct type(s) and volumes of biointermediates were used, all facilities that produced and used biointermediates would need to be audited, which could be a large number of facilities if there were no limits on biointermediate transfers. Such oversight would be unrealistic for EPA or independent third parties to oversee, which would increase opportunities for the generation of invalid or fraudulent RINs and undermine the intent of the program. Since we expect most biointermediate situations will involve relatively small

¹⁶⁹ Informally, this type of relationship is called a “many-to-one” relationship in that under this approach many biointermediate production facilities could only transfer biointermediates to a single renewable fuel production facility. In contrast, the proposed REGS rule would have allowed biointermediate production facilities to transfer a biointermediate to more than one renewable fuel production facility and for renewable fuel production facilities to receive biointermediates from multiple biointermediate production facilities. Informally, this type of relationship is called a “many-to-many” relationship in that biointermediate production facilities could transfer biointermediates to many renewable fuel production facilities, and renewable fuel production facilities could receive biointermediates from many biointermediate production facilities.

biointermediate production facilities and relatively large renewable fuel production facilities, we have structured the program to provide flexibility where it is most needed and most beneficial for enabling increased renewable fuel production. Namely this new proposal continues to allow multiple biointermediate producers to provide their product to a single renewable fuel production facility to be converted into renewable fuel. We seek comment on our proposal to limit biointermediate transfers such that renewable fuel production facilities can receive biointermediates from multiple biointermediate producers but each biointermediate producer can transfer its product to only one renewable fuel producer.

Under this proposal, the biointermediate and renewable fuel producer would need to designate through registration the receiving renewable fuel production facility to which biointermediate would be transferred. As explained in Section VII.B and docket memo, we are proposing anew the REGS provisions that require tracking of the volumes of biointermediate, and associated properties of the biointermediate, through periodic reporting requirements.¹⁷⁰ Recognizing that biointermediate producers may need to periodically change the receiving renewable fuel production facility, we are proposing that biointermediate producers would be allowed to change their designated renewable fuel production facility no more than one time per calendar year unless, in its sole discretion, EPA determined that it was appropriate to allow the biointermediate producer to change its designated renewable fuel production facility more than once in a year. An example of a situation where EPA would consider it appropriate is the closure of the receiving renewable fuel production facility.

We do not believe this restriction would impose much practical burden on transfers of biointermediate producers. We note that under the proposed biointermediates program, the newly designated receiving renewable fuel production facility would need to be registered to use the

¹⁷⁰ These provisions are described in greater detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

biointermediate, which would in turn require an engineering review by a professional engineer. This process can take several months to arrange for a PE to conduct the engineering review, submit the registration update to EPA, and have it ultimately accepted by EPA. Also, as discussed in Section VII.C.4, under this proposal both the biointermediate and renewable fuel producers would need their respective facilities audited under the QAP program, which would also increase the amount of time needed to change the designated receiving renewable fuel production facility. Consequently, because of the time to conduct new engineering reviews and have new quality assurance plans approved by EPA, we believe that biointermediate producers would be practically limited to only being able to change their receiving renewable fuel production facility once per calendar year. Despite these practical limitations, we seek comment on whether and in which narrow circumstances we should allow biointermediate producers to change their designated receiving renewable fuel production facility more than once a calendar year.

We believe that the proposed biointermediate transfer provisions will enable both the production and use of biointermediates and enhance our ability to provide compliance and enforcement oversight. In most cases, we believe that a single renewable fuel production facility would receive all biointermediate produced from a biointermediate production facility. This approach is primarily based on discussions with parties interested in the production and use of biointermediates, and on our understanding of how we believe that biointermediate transfers would be contracted by biointermediate and renewable fuel productions and how renewable fuel production facilities would be designed to accommodate the use of biointermediates.

We seek comment on the proposed provisions for biointermediate transfers. We specifically seek comment on specific examples of where the proposed provisions may encourage or restrict the use of biointermediates to generate renewable fuel volumes and the likely volumes that may be affected, as well as on any examples of how the proposed provisions

may or may not provide for sufficient oversight or RIN fraud prevention. We also ask that commenters describe any additional or alternative provisions that might allow the use of biointermediates from multiple facilities to be used to produce fuel at multiple renewable fuel producers while still allowing effective oversight.

4. Mandatory QAP

We are proposing anew the revisions to the RFS QAP to cover biointermediate production and use.¹⁷¹ The RFS QAP provides for auditing of renewable fuel production facilities by independent third-party auditors who review feedstock elements, process elements, and RIN generation elements to determine if renewable fuel production is consistent with EPA requirements. These independent third-party auditors verify the RINs generated from these renewable fuel production facilities. Under this proposal, independent third-party auditors would review feedstock and process elements for biointermediate production facilities like those currently reviewed for renewable fuel production facilities. In turn, these independent third-party auditors would verify that the biointermediate was properly produced.

We are also proposing to require QAP participation for biointermediate producers and renewable fuel producers that use biointermediates. Due to the need to balance the competing priorities of allowing the timely use of biointermediates for the production of renewable fuel in the near term and establishing a program that EPA can effectively oversee for the long term, we are proposing that biointermediate producers and renewable fuel producers that use biointermediates must participate in the RFS QAP. Mandating QAP participation for biointermediate producers and renewable fuel producers that use biointermediates will help ensure that RINs generated from biointermediates are valid.

¹⁷¹ As explained in Section VII.B, we are reproposing the biointermediates provisions of the REGS rule. We discuss the proposed QAP requirements in more detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

Under the REGS proposal, we had proposed that participation in the QAP could have become voluntary after the end of the proposed interim period.¹⁷² However, since the time of the proposed REGS rule, we have developed a better understanding of the potential complexity of overseeing the transfers of biointermediates and renewable fuels under the RFS program. Based on this understanding, we believe that allowing the production and use of biointermediates to go unverified would provide increased opportunity for the use of unapproved feedstocks and the generation of fraudulent RINs through double-counting. We believe having an independent third-party auditor verify the production of both the biointermediate and the renewable fuel is necessary to help oversee the added complexity that results from having renewable fuel processing occur at two different facilities. Further, we are proposing that the biointermediate producer and renewable fuel producer must use the same QAP vendor to ensure consistent oversight of the two facilities.

We do not believe that mandatory QAP participation would be overly burdensome. Many of the parties that have encouraged EPA to adopt biointermediate regulations have indicated they intend to participate in the QAP program. We also expect that obligated parties that obtain and use RINs generated for renewable fuels made from biointermediates for compliance would request that biointermediate and renewable fuel producers participate in the QAP as obligated parties would continue to be liable for the replacement of any invalid RINs generated on such renewable fuels.

We seek comment on making QAP participation mandatory for both the biointermediate producer and the renewable fuel producer where renewable fuel is produced from biointermediates.

¹⁷² In the proposed REGS rule, the interim period was a period of approximately 12 months where a more limited set of regulatory provisions would have applied to parties that produced, transferred, and used biointermediates. This action does not include a proposed interim period.

5. Product Transfer Documents (PTD)

Consistent with the REGS proposal, we are proposing anew PTD requirements for the transfers of biointermediates from biointermediate producers to renewable fuel producers.¹⁷³ These PTD requirements include information about the biointermediates type, volume, renewable content, cellulosic content (if applicable), and the transfer of records needed for the renewable fuel producer to demonstrate that the biointermediate was produced using qualifying renewable biomass and that other aspects needed to ensure that the RFS regulations were met.

In addition to reproposing the PTD requirements for transfers of biointermediates, we are also proposing for the first time PTD requirements for RINs generated from renewable fuel produced from biointermediates. In the REGS proposal, we did not propose any changes to the PTD requirements for RINs generated from renewable fuels produced from biointermediates. Since the REGS proposal, due to the way that RINs are transacted in EMTS,¹⁷⁴ we have realized that parties that transfer and use RINs generated from renewable fuels made from biointermediates may not be aware that the RINs came from biointermediates. Such parties may wish to have identified such RINs because 40 CFR 80.1460 prohibits any party from transferring invalid RINs. These parties may wish to have information related to whether the RIN was produced from a renewable fuel made from a biointermediate prior to transacting the RINs. Therefore, we are also proposing additional elements for PTDs related to RINs under 40 CFR 80.1453(a). Under this proposal, RINs PTDs would need to identify that the RINs were generated from renewable fuels produced from biointermediates as well as the EPA-issued company and facility numbers of the biointermediate producer. We believe that by requiring

¹⁷³ As explained in Section VII.B, we are reproposing the biointermediates provisions of the REGS rule. We discuss the proposed PTD requirements in more detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

¹⁷⁴ In EMTS, parties can specify to transact RINs from specific renewable fuel producers by facility and D-code. Current EMTS functionality would not allow parties to transact RINs based on a whether the RINs were generated from renewable fuel made from a specific feedstock (or biointermediate if the proposed biointermediate provisions are finalized). Furthermore, EMTS would not indicate to parties transacting the RINs in any way whether such RINs came from a renewable fuel made from a biointermediate.

such information on the RIN PTDs, parties that transfer or use such RINs would better understand whether they were transferring and using RINs generated from renewable fuels produced from biointermediates. This would allow parties that transact RINs generated from renewable fuels made with biointermediates to make decisions on whether to transact the RIN. We seek comment on both the proposed PTD requirements for transfers of biointermediates and on the newly proposed RIN PTD requirements.

6. Registration, EMTS and Reporting Requirements

As in the REGS proposal, we are proposing here the registration, reporting, and EMTS requirements for biointermediates that are needed in order to implement the program.¹⁷⁵ Some of these proposed elements have already been discussed in conjunction with the proposed biointermediates provisions addressed in this section. Others are additional elements reflecting our current implementation of related provisions under the RFS program that have changed since we proposed the REGS rule. Registration elements include proposed requirements for renewable fuel producers that intend to produce or utilize biointermediates as part of their production process to register these processes and related information similar to other feedstock registration requirements. Biointermediate producers must also register production capacities, information on the feedstocks intended for processing, co-products produced and, similar to renewable fuel producers, complete an initial engineering review followed by an update every three years. For EMTS, the renewable fuel producer utilizing biointermediates in the production of renewable fuel would report the type and quantity of biointermediates used for the batch and the EPA facility registration number for each production facility. Renewable fuel producers utilizing biointermediates would report total co-products and the process(es), feedstock(s), and biointermediate(s) used and proportion of renewable volume attributable to each process and

¹⁷⁵ We discuss the proposed registration, EMTS, and reporting requirements for biointermediates in more detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

feedstock. Biointermediate producers or importers would report for each batch the volume, identifying information for the entity receiving title to the batch and other characteristics of the batch and associated production processes and characteristics of the batch.

We seek comment on the proposed registration, reporting, and EMTS requirements for biointermediates. We are also seeking comment on potential improvements regarding the functionality of EMTS or other information systems related to the production, transfer, and use of biointermediates. While not part of the proposed regulations themselves, we believe it is important to identify areas where functional improvement is desired by the users of our information systems. Such feedback as part of this proposal would help us identify areas for improvement and prioritize development. For example, as discussed in Section VII.C.5, we believe parties that transfer and use RINs generated from renewable fuel produced from biointermediates may want the ability to tie the RINs back to specific biointermediates or biointermediate producers. We believe some parties may want to track whether RINs were generated from a specific biointermediate producer in EMTS. However, such a change would involve significant modification to EMTS, and therefore is not something that EPA would undertake unless desired and resources permitted. However, knowing what additional functionality is desired may allow us to include such features into our upcoming development plans.

7. Attest Engagement and Recordkeeping Requirements

We are proposing anew the attest engagement and recordkeeping requirements for biointermediates discussed in the proposed REGS rule, as well as some updating some of these requirements for biointermediates since that proposal.¹⁷⁶ Updated proposed requirements for

¹⁷⁶ We discuss the proposed attest engagement and recordkeeping requirements for biointermediates in more detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

attest engagement audits include validating the list of renewable fuel producers receiving any transfer of biointermediate batches and calculating the total volume received. We believe these updated requirements for attest engagement audit are appropriate to help ensure that the limits on biointermediate transfers discussed in Section VII.C.3 are followed.

We are proposing updated recordkeeping requirements to reflect the other changes discussed in this section. These updates are needed to help independent third parties and EPA conduct audits.

We seek comment on the proposed attest engagement and recordkeeping requirements for biointermediates. Specifically, we request comment on whether the attest engagement and recordkeeping requirements are adequate and whether any additional requirements are needed to enable implementation of the program.

8. Invalid RINs from Biointermediates

We are proposing anew the provisions that address the treatment of invalid RINs generated on renewable fuels produced from biointermediates.¹⁷⁷ Due to the potential complexity involved in determining the validity of RINs generated for renewable fuel produced from a biointermediate, we proposed in the REGS rule and are proposing anew that if any of the RINs in any batch of renewable fuel produced from a biointermediate are deemed invalid, then all RINs generated for that batch of renewable fuel would be considered invalid except to the extent that EPA, in its sole discretion, determines that some portions of these RINs would be valid. Since the proposed REGS rule, we have further considered how invalid RINs generated on renewable fuels produced from biointermediates could potentially be treated in complicated circumstances: where multiple biointermediate and/or non-biointermediates are simultaneously processed to

¹⁷⁷ We discuss the proposed liability provisions for biointermediates in more detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

make renewable fuel with the same D-code, where biointermediate and/or non-biointermediates are simultaneously processed that result in multiple D-codes, and where biointermediates are co-processed with non-renewable biomass (e.g., crude oil). Given the range of biointermediates that would be permitted under this proposal and based on discussions with parties that have expressed interest in using various types of biointermediates in the future, we believe it is important to address this situation clearly in the regulations as apportioning which RINs were tied to which gallons of renewable fuel made in these situations is complicated.

In all cases, where a biointermediate is processed simultaneously with other feedstocks or co-processed with non-renewable biomass, we are proposing that all RINs generated from the renewable fuel would be invalid. This means that even if multiple different RIN batches would be generated in EMTS for apportioned volumes of the batch of renewable fuel, all RIN batches in their entirety would be invalid if any amount of non-qualifying biointermediate was used to generate any RIN on any volume of the renewable fuel. This would also include situations where the multiple RIN batches were for different D-codes or where multiple different biointermediates were used. We proposed this approach in the REGS rule, and we are now proposing additional regulatory provisions to better effectuate the intended outcome. We believe this provision is appropriate to avoid having to determine specifically which RINs are invalid in situations where biointermediates are processed simultaneously with other feedstocks or co-processed with non-renewable biomass, which may be difficult to ascertain. We also believe that this proposed provision would provide a strong incentive for renewable fuel producers to conduct due diligence oversight procedures on the biointermediate producer to avoid the invalidation of an entire batch of RINs.

We are also proposing that in cases where the renewable fuel is a renewable diesel, renewable gasoline, renewable diesel blendstock, or renewable gasoline blendstock, if a RIN is invalid under 40 CFR 80.1431(a)(1), the gallon of gasoline or diesel fuel for which the RIN was

generated would incur an RVO. The regulations at 40 CFR 80.1407(f)(1) already exclude “[a]ny renewable fuel as defined in §80.1401” from the volume of gasoline or diesel fuel produced or imported used to calculate an obligated party’s annual RVO. In many cases, RINs are determined to be invalid because the renewable fuel was not made from renewable biomass, the RINs were double-counted, or were otherwise invalidly generated. In such cases, any volume of renewable gasoline or renewable diesel fuel would no longer be considered renewable fuel and therefore could not be excluded from an obligated party’s RVO. We believe the situation in which a volume of renewable fuel (e.g., a renewable diesel or gasoline) that was excluded from an obligated party’s RVO but is no longer considered a renewable fuel will become more common if we allow the use of biocrude processed through crude refineries as a way to produce more advanced and cellulosic biofuels. We are proposing changes to the regulations at 40 CFR 80.1407(f)(1) to reiterate the requirement that renewable fuel for which a RIN is determined to be invalidly generated may not be excluded from a party’s RVOs.

Finally, as a result of the proposed changes described above, we are proposing corresponding prohibited activities to address situations where biointermediates are produced, transferred, and used.¹⁷⁸ Specifically, we are proposing the following prohibited activities:

- Use of a feedstock to produce a biointermediate not covered by an existing pathway or in the proposed definition of a biointermediate discussed in Section VII.C.1;
- Illegal transfers of biointermediates consistent with the newly proposed provisions described in Section VII.C.2; and
- Generation of RINs from renewable fuels produced from biointermediates that have not been verified under the QAP as described in Section VII.C.3.

¹⁷⁸ For a discussion of the proposed REGS rule liability and prohibited act provisions that we are reproposing see 81 FR 80839 (November 16, 2016).

We believe these additional proposed prohibited activities are needed to help us enforce violations and ensure compliance of the proposed biointermediate provisions. We seek comments on these proposed prohibited activities and whether any additional prohibited activities related to the production, transfer, and use of biointermediates are necessary to ensure the integrity of RINs generated from biointermediates.

We believe that these additional elements coupled with the repropose REGS rule provisions concerning liability and the treatment of invalid biointermediates would provide strong incentives on the part of renewable fuel producers to diligently be involved in overseeing the production, transfer, and use of biointermediates. We believe these provisions are necessary to address the increased complexity of allowing renewable fuels to be processed at more than one production facility. We seek comment on our proposed liability provisions for the production, transfer, and use of biointermediates and the treatment of invalid RINs generated from renewable fuels produced from biointermediates.

D. Other Considerations Related to Biointermediates

1. C-14 Testing and Mass Balance for RIN Generation

We are repropose the requirement that C-14 testing, specifically Method B (accelerator mass spectrometry) of ASTM International (ASTM) D6866, be used in cases where biointermediates are co-processed with petroleum feedstocks at a renewable fuel production facility.¹⁷⁹ We are also seeking comment on potential alternatives to direct C-14 measurement of renewable content of co-processed fuels. In the proposed REGS rule, we proposed to require C-14 testing for co-processed fuels because we believe that the volume of biointermediate co-

¹⁷⁹ In the 2010 RFS2 final rule (see 75 FR 14876, March 26, 2010), EPA promulgated requirements for the generation of RINs for renewable fuel co-processed with petroleum-based fuels, and provided two methods for determining the renewable content of co-processed fuels: (1) Mass balance; or (2) Using Methods B or C of ASTM D6866 C-14 testing. See 40 CFR 80.1426(f)(4). These provisions from the proposed REGS rule are described in greater detail in the memorandum to the docket, “Proposed Biointermediate Provisions in the proposed Renewables Enhancement Growth Support Rule,” available in the docket for this action.

processed with petroleum at a crude refinery would likely be a small fraction of the refinery's throughput and would make it difficult to rely on a mass balance approach for RIN generation. Our primary concern was, and is, that the co-processed fuel would contain little or no renewable content from the biointermediate and that using the mass balance approach could result in the generation of RINs for the nonrenewable portion of the co-processed fuel. Additionally, as noted in the REGS proposal Method B of ASTM D6866 has greater precision compared with Method C.¹⁸⁰

In the proposed REGS rule we sought comment on whether our proposed approach was appropriate, whether there are other methods that could produce similarly accurate and precise renewable content measurement to Method B of ASTM D6866 in co-processed fuels, and whether EPA should allow parties to petition for the use of a company-specific method to determine the renewable content of co-processed, partially renewable fuel produced from a biointermediate. We received a number of comments suggesting that EPA allow for the use of mass balance instead of requiring direct testing of renewable content using C-14 analysis in co-processed fuels. While many commenters highlighted the practical and financial benefits of using mass balance instead of direct C-14 measurements, commenters on the REGS proposal did not substantially address the concerns we raised regarding the accuracy and precision of a mass balance approach especially where the biointermediate constitutes a relatively small portion of the co-processed feedstock. Specifically, commenters noted how difficult it is to collect samples for direct C-14 measurement from a crude refinery, the added expense and time to conduct the testing, and issues related to the validity of C-14 testing when there is only a small amount of renewable content in the co-processed fuel. We also received comments in support of a facility specific approach, but commenters did not provide information on how such a process would

¹⁸⁰ See Martin R. Haverly et al., *Biobased Carbon Content Quantification through AMS Radiocarbon Analysis of Liquid Fuels*, 237 *Fuel*, 1108, (2019).

work or how such a process could result in sufficiently accurate and precise measurements of renewable content in co-processed fuels.

We continue to believe that direct C-14 measurement is the most accurate and precise way to determine the renewable content of co-processed fuels and that it is necessary to ensure whether a co-processed fuel actually contains renewable content. We also note that in Section VIII.F, we are proposing to define what it means for a renewable fuel to be “produced from renewable biomass.” Under this proposed definition, only energy in the renewable content of the finished fuel that was produced from renewable biomass would qualify as renewable fuel for RIN generation. As discussed in Section VIII.F, this proposed regulatory definition of “produced from renewable biomass” is consistent with the statutory requirements that renewable fuels be transportation fuel, heating oil, or jet fuel. Our proposal for direct measurement of renewable content in co-processed fuels is consistent with and necessary to effectuate this proposed definition of “produced from renewable biomass.” That is, because we do not believe a mass balance approach is capable of accurately determining the renewable content of fuels produced through co-processing of biointermediates, allowing renewable fuel production facilities to rely on this approach for RIN generation would be inconsistent with the definition of “produced from renewable biomass.”

We seek comment on whether we should provide alternatives to requiring direct C-14 measurement of renewable content in co-processed fuels where biointermediates are used. While we are proposing to remove the allowance for use of mass balance for renewable fuel production facilities that co-process biointermediates with petroleum feedstocks, we also seek comment on whether and under what conditions it might be appropriate to allow for the use of mass balance when there is a sufficient amount of co-processed biointermediate to ensure that mass balance calculations actually represent renewable content in the co-processed fuel. For example, we could allow the use of mass balance if the biointermediate represented at least 10 percent of the

total feedstock processed to produce the batch. If a sufficient amount of a biointermediate was used to make the co-processed fuel, we might have assurance that some of the biointermediate was converted into renewable fuel.

We also seek comment on whether we could allow the parties that co-process renewable fuels to develop a facility specific statistical model for use in estimating low levels of renewable content in co-processed fuel. Through such a process, renewable fuel producers could conduct a rigorous test program on a range of biointermediate levels processed through a specific facility to develop a statistical model to estimate renewable content of co-processed fuels at that specific facility for RIN generation. Similar to a mass balance approach, we acknowledge that a poorly-designed statistical model may inaccurately estimate the amount of renewable content in a co-processed fuel or indicate that renewable content was present in a co-processed fuel when there was none, especially at low levels.

Finally, we seek comment on whether there are any circumstances where we could rely upon results from Method C of ASTM D6866 (“Method C”) to measure renewable content of co-processed fuels made from biointermediates. As mentioned above, we continue to have concerns with Method C when measuring relatively small amounts of renewable content in co-processed fuels due to Method C’s lower precision. However, we would consider the use of Method C if its accuracy and precision were improved and codified in an updated ASTM method or if Method C was restricted to measuring higher levels of renewable content (e.g., above 10 percent) where we could be assured that measurement represented valid renewable content in co-processed fuels.

When commenting on the proposed requirement for direct C-14 testing, we specifically ask that commenters provide any relevant information or data on any demonstrating that an alternative is as accurate or precise in measuring the renewable content of co-processed fuels as the proposed C-14 method.

2. Standalone Esterification Pathway

In the proposed 2020 RVO rule, we proposed to add a standalone esterification pathway to rows F and H of Table 1 of 40 CFR 80.1426.¹⁸¹ This would have allowed parties who have processing units that can take feedstocks listed in rows F and H of Table 1 of 40 CFR 80.1426 that have high-FFA content to separate the FFAs and triglycerides for chemical processing in separate standalone esterification and transesterification units, and generate RINs for the biodiesel produced.¹⁸² We also noted in the proposed 2020 RVO rule that while this proposal would allow the separation of FFAs and triglycerides in qualified high-FFA feedstocks at the facility producing the biodiesel through these processes, regulatory amendments were needed to address situations where this separation took place at a facility other than the ultimate renewable fuel production facility.¹⁸³ We stated that the biointermediates provisions of the REGS rule would need to be finalized for parties to use FFAs separated from triglycerides in a feedstock at a location other than the biodiesel production facility.¹⁸⁴

In the final 2020 RVO rule, we did not finalize the standalone esterification pathway, but noted that we may finalize the standalone esterification pathway in a future action.¹⁸⁵ We are proposing to include FFA feedstocks as one of the biointermediates specifically included in the proposed definition of biointermediate. We note that we would also need to finalize the previously proposed standalone esterification pathway for parties to process FFA feedstocks to biodiesel through direct esterification, which is one of the primary methods for producing renewable fuel from FFA feedstocks. If the proposed biointermediates provisions in this action are finalized and FFA feedstocks are included in the definition of biointermediates, we intend to also finalize the previously proposed standalone esterification pathway. In this case, we would

¹⁸¹ See 84 FR 36801-36802 (July 29, 2019).

¹⁸² See 84 FR 36801-36803 (July 29, 2019).

¹⁸³ See 84 FR 36802 (July 29, 2019).

¹⁸⁴ *Id.*

¹⁸⁵ See 85 FR 7058 (February 6, 2019).

respond to the public comments received previously on the proposed standalone esterification pathway in the 2020 RVO rule proposal and any additional public comments related to the standalone esterification pathway received on this proposal in such a final action. Unlike the biointermediates provisions from the REGS rule that are being re-proposed in this action, we are not re-proposing the standalone esterification pathway here and commenters do not have to resubmit previously submitted comments to this docket in order for them to be considered.

3. Intracompany Transfers of Biointermediates

We are seeking comment on whether we should provide flexibility for intracompany transfers of biointermediates (i.e., cases where the same company owns both the biointermediate production facility and the renewable fuel production facility). In the proposed REGS rule, we did not propose any flexibilities for companies that transferred biointermediates between their biointermediate production facility and renewable fuel production facility. Under the proposed REGS rule, such companies would have to comply with all of the requirements regardless of whether they owned both the biointermediate production facility and the renewable fuel production facility.

During the public comment period for the REGS proposal, we received comments suggesting that we should not impose the new requirements for biointermediates when the party produces both the biointermediate and the renewable fuel. These commenters argued that they would be able to effectively track the production and use of biointermediates so additional compliance and enforcement provisions would not be needed. However, we believe that all parties should have consistent requirements on biointermediates. We believe that there could still be concerns with intracompany transfers of biointermediates as this lack of transparency could incent the generation of fraudulent RINs. In fact, we believe that the issues could be worse because if we exempted intracompany transfers from the proposed biointermediates provisions, there would be no required records, reports, or oversight on whether that company appropriately

produced, transferred, or used the biointermediate. This would allow ample opportunities for parties to use non-qualifying feedstocks or generate fraudulent RINs and provide EPA no oversight mechanisms. The main purpose of the proposed biointermediate provisions is to ensure that EPA and third parties such as QAP and attest auditors have records and reports to verify the production, transfer, and use of biointermediates. These provisions help ensure that RINs generated from renewable fuels produced from biointermediates are valid.

We continue to believe that the proposed regulatory requirements are needed in this case, and, as such, we are not proposing to provide any flexibilities for intracompany transfers of biointermediates at this time. Nevertheless, we seek comment on whether such flexibilities are appropriate. Commenters should articulate in their public comments specifically what provisions they believe EPA could provide flexibility and how effective oversight of the program would be maintained.

VIII. Amendments to Fuel Quality and RFS Regulations

This section describes the regulatory changes we are proposing for fuel quality and RFS regulations.

A. BBD Conversion Factor for Percentage Standard

In the 2010 RFS2 rule, we determined that because the BBD standard was a “diesel” standard, its volume must be met on a biodiesel-equivalent energy basis.¹⁸⁶ In contrast, the other three standards (cellulosic biofuel, advanced biofuel, and total renewable fuel) must be met on an ethanol-equivalent energy basis. At that time, biodiesel was the only advanced renewable fuel that could be blended into diesel fuel, qualified as an advanced biofuel, and was available at greater than de minimis quantities.

¹⁸⁶ See 75 FR 14670, 14682 (March 26, 2010).

The formula for calculating the applicable percentage standards for BBD needed to accommodate the fact that the volume requirement for BBD would be based on biodiesel equivalence while the other three volume requirements would be based on ethanol equivalence. Given the nested nature of the standards, however, RINs representing BBD would also need to be valid for complying with the advanced biofuel and total renewable fuel standards. To this end, we designed the formula for calculating the percentage standard for BBD to include a factor that would convert biodiesel volumes into their ethanol equivalent. This factor was the same as the Equivalence Value for biodiesel, 1.5, as discussed in the 2007 RFS1 final rule.¹⁸⁷ The resulting formula¹⁸⁸ (incorporating the recent modification to the definitions of GE_i and DE_i)¹⁸⁹ is shown below:

$$Std_{BBD,i} = 100 \times \frac{RFV_{BBD,i} \times 1.5}{(G_i - RG_i) + (GS_i - RGS_i) - GE_i + (D_i - RD_i) + (DS_i - RDS_i) - DE_i}$$

Where:

$Std_{BBD,i}$ = The biomass-based diesel standard for year i, in percent.

$RFV_{BBD,i}$ = Annual volume of biomass-based diesel required by 42 U.S.C. 7545(o)(2)(B) for year i, in gallons.

G_i = Amount of gasoline projected to be used in the 48 contiguous states and Hawaii, in year i, in gallons.

D_i = Amount of diesel projected to be used in the 48 contiguous states and Hawaii, in year i, in gallons.

¹⁸⁷ See 72 FR 23900, 23921 at Table III.B.4-1 (May 1, 2007).

¹⁸⁸ See 40 CFR 80.1405(c).

¹⁸⁹ See 85 FR 7016 (February 6, 2020).

$RG_i =$ Amount of renewable fuel blended into gasoline that is projected to be consumed in the 48 contiguous states and Hawaii, in year i , in gallons.

$RD_i =$ Amount of renewable fuel blended into diesel that is projected to be consumed in the 48 contiguous states and Hawaii, in year i , in gallons.

$GS_i =$ Amount of gasoline projected to be used in Alaska or a U.S. territory, in year i , if the state or territory has opted-in or opts-in, in gallons.

$RGS_i =$ Amount of renewable fuel blended into gasoline that is projected to be consumed in Alaska or a U.S. territory, in year i , if the state or territory opts-in, in gallons.

$DS_i =$ Amount of diesel projected to be used in Alaska or a U.S. territory, in year i , if the state or territory has opted-in or opts-in, in gallons.

$RDS_i =$ Amount of renewable fuel blended into diesel that is projected to be consumed in Alaska or a U.S. territory, in year i , if the state or territory opts-in, in gallons.

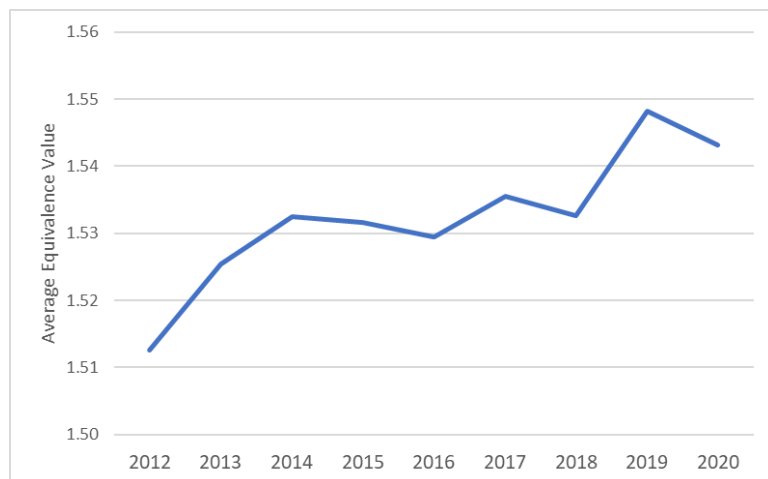
$GE_i =$ The total amount of gasoline projected to be exempt in year i , in gallons, per §§80.1441 and 80.1442.

$DE_i =$ The total amount of diesel projected to be exempt in year i , in gallons, per §§80.1441 and 80.1442.

In the years following 2010 when the percent standard formula for BBD was first promulgated, advanced renewable diesel production has grown. Most renewable diesel has an

Equivalence Value of 1.7, and its growing presence in the BBD pool means that the average Equivalence Value of BBD has also grown.¹⁹⁰

Figure VIII.A-1: Average Equivalence Value for BBD: Containing Both Biodiesel and Renewable Diesel



Source: Consumption of Biodiesel and Renewable Diesel with D4 RINs according to Data from EMTS

Because the formula currently specified in the regulations for calculation of the BBD percentage standard assumes that all BBD used to satisfy the BBD standard is biodiesel, it biases the resulting percentage standard low, given that in reality there is some renewable diesel in BBD. The bias is small, on the order of 2 percent, and has not impacted the supply of BBD since it is the higher advanced biofuel standard rather than the BBD standard that has driven the demand for BBD. Nevertheless, we believe that it would be appropriate to modify the factor used in the formula to more accurately reflect the amount of renewable diesel in the BBD pool. The average Equivalence Value of BBD appears to have grown over time without stabilizing. Given the growth in facilities producing renewable diesel as discussed in Chapter 5.2 of the DRIA, it is possible that the average Equivalence Value for BBD could continue to grow after 2020. As a result, we believe that the average Equivalence Value for BBD is likely to be at least 1.55. We therefore propose and seek comment on replacing the factor of 1.5 in the percentage standard

¹⁹⁰ Under 40 CFR 80.1415(b)(4), renewable diesel with a lower heating value of at least 123,500 Btu/gallon is assigned an Equivalence Value of 1.7. A minority of renewable diesel has a lower heating value below 123,500 BTU/gallon and is therefore assigned an Equivalence Value of 1.5 or 1.6 based on applications submitted under 40 CFR 80.1415(c)(2).

formula for BBD with a factor of 1.55.¹⁹¹ We are not proposing to change any other aspect of the percentage standard formula for BBD.

The proposed change would have a small impact on the calculation of the applicable percentage standard for BBD. For instance, for the 2021 BBD volume of 2.43 billion gallons finalized in the 2020 final rule, the applicable percentage standard would be 2.20 percent using the factor of 1.55, as compared to 2.13 percent using the factor of 1.5. However, this proposed change would have no impact on the generation of RINs. All biodiesel has generated and would continue to generate 1.5 RINs per gallon, and most renewable diesel has generated and would continue to generate 1.7 RINs per gallon. Similarly, compliance with the applicable percentage standards would not change, in that all D4 RINs would continue to count toward meeting the RVO for BBD.

Finally, the volume requirement for BBD ($RFV_{BBD,i}$ in the formula above) would be unaffected by the change to the formula for calculating the percentage standard.

B. Changes to Registration for Baseline Volume

We are proposing to revise the registration requirements at 40 CFR 80.1450(b)(1)(v) as well as the definition of “baseline volume” at 40 CFR 80.1401 to allow non-exempt (i.e., non-grandfathered) renewable fuel producers to use either nameplate capacity or actual peak capacity for their facility’s baseline volume if permitted capacity cannot be determined. We are not proposing to change the requirements for establishing the baseline volume of grandfathered

¹⁹¹ While we are proposing to only revise the factor of 1.5 in the percentage standard formula for BBD, we are including all four of the percentage standard formulas in our proposed amendatory text for 40 CFR 80.1405(c). This is due to the manner in which the original formulas were published in the CFR, which does not allow for revisions to a single formula without republishing all of the formulas. We are not reexamining any aspect of these formulas beyond the change to the factor of 1.5 in the BBD formula, and any comments on other aspects of the formulas are beyond the scope of this rulemaking.

facilities.^{192,193} All non-grandfathered facilities with an applicable permitted capacity would continue to be required to register using the permitted capacity pursuant to 40 CFR 80.1450(b)(1)(v)(A). Under the existing requirement, these facilities must use their actual peak capacity¹⁹⁴ as their baseline volume if the air permits do not specify the maximum rated annual output of renewable fuel and can only use nameplate capacity¹⁹⁵ to establish baseline volume if insufficient production records existed to establish actual peak capacity. The proposed regulatory revision would give non-grandfathered facilities that do not have an applicable permitted capacity the flexibility to establish baseline volume using either actual peak capacity or nameplate capacity.

We are proposing this revision in order to allow for more up-to-date information to be used in establishing the baseline volumes of non-grandfathered facilities. Actual peak capacity is based on actual production tied to when EISA was enacted (i.e., December 2007), which is now more than a decade in the past. This historical peak capacity is not necessarily an accurate reflection of the facility's current production capacity. Since the passage of EISA, facilities may have improved efficiency, expanded the facility, or experienced an increase in production due to increased demand, resulting in larger production than the year used to calculate actual peak capacity. Having accurate capacity information for registered renewable fuel facilities is important for EPA in helping to identify whether facilities are generating an appropriate number

¹⁹² For purposes of this preamble, a "grandfathered facility" is a renewable fuel production facility that has volumes that are exempt from the renewable fuel lifecycle GHG reduction threshold under 40 CFR 80.1403(c). This provision exempts (i.e., "grandfathers") facilities that commenced construction on or before December 19, 2007, did not discontinue construction for a period of 18 months after commencement of construction, and completed construction by December 19, 2010.

¹⁹³ For grandfathered facilities, baseline volume is the maximum volume of grandfathered fuel for which the facility is allowed to generate RINs. For non-grandfathered facilities, baseline volume is intended to indicate the maximum amount of renewable fuel that the facility is capable of producing. Actual peak capacity, however, may not be a good indicator of maximum capacity.

¹⁹⁴ Actual peak capacity is based on either the five years prior to registration or, if there was no production prior to registration, the first three years after start-up.

¹⁹⁵ Nameplate capacity is the peak designed capacity of the facility.

of RINs.¹⁹⁶ This proposed change would allow a non-exempt facility to choose whether to use actual peak capacity or nameplate capacity if permitted capacity cannot be determined. Non-exempt facilities already registered using actual peak capacity would have the option to switch to nameplate capacity at any time.¹⁹⁷ This change would have no impact on facilities who choose not to use this option. We seek comment on this proposed change.

C. Changes to Attest Engagements for Parties Owning RINs (“RIN Owner Only”)

We are proposing to exempt parties that transact a relatively small number of RINs from the annual attest engagement requirements. In order to qualify for the proposed exemption, parties would need to be registered as a “RIN Owner Only” and not registered or engaged in any other role (e.g., obligated party, exporter of renewable fuel, renewable fuel producer, renewable fuel importer, etc.). Such parties are currently required to submit an annual attest engagement under 40 CFR 80.1464(c), regardless of the number of RINs they transact or hold in a compliance year. Under the existing regulations, for example, a party whose only activity was to buy and sell a single RIN in any given compliance year would be required to complete an attest engagement for that year. Additionally, some parties that own a small number of RINs have difficulty selling such small denominations of RINs (e.g., hundreds of separated D6 RINs) and can hold such RINs until they expire. These parties must then arrange for an annual attest engagement performed by a certified professional accountant (CPA) for those RINs, which can be quite costly especially when compared to the relatively low value of the small number of RINs owned.

We believe that parties who, in a given compliance year, are registered as a “RIN Owner Only,” who transact 10,000 or fewer RINs, and who do not exceed a RIN holding threshold

¹⁹⁶ Because the baseline volume of an exempt (i.e., grandfathered) facility is by definition tied to either December 19, 2007, or December 31, 2009 (see 40 CFR 80.1403(c) and (d) and 80.1450(b)(1)(v)(B)), current production capacity is not relevant for such a facility.

¹⁹⁷ Facilities could also choose to keep their baseline volume as actual peak capacity.

under 40 CFR 80.1435, should not be required to complete an attest engagement for that compliance year. A party who is registered as a “RIN Owner Only” does not generate RINs and does not have an RVO. We believe that the information contained in EMTS and RIN activity reports for a RIN Owner Only who transacts a relatively small number of RINs and who does not exceed a RIN holding threshold conveys the necessary compliance information, and that the attest engagements for these parties do not add much value relative to their expense. Many of the affected parties are smaller businesses that are required to arrange the services of a CPA to perform their annual attest engagement. Making this change to the attest engagement requirements may result in a cost savings to these typically smaller businesses, without adversely affecting RFS program oversight.

We intend that the total number of RINs transacted in the year be counted toward the 10,000 RIN limit. RINs “transacted” includes RINs retired for reasons other than compliance retirements, such as the reason code “voluntary RIN retirement.” This means that if a party buys 5,000 RINs and sells 6,000 RINs in a year, the party will have transacted 11,000 RINs and would be required to complete the attest engagement for that year. We are proposing the 10,000 RIN limit based upon programmatic experience—specifically, we believe it reflects a reasonable level of activity below which the utility of the attest engagement is reduced. We seek comment on establishing this proposed attest engagement exemption for parties that transact fewer than 10,000 RINs in a compliance year and what the appropriate level of RIN transactions for this exemption should be.

D. Public Access to Information

Exemption 4 of the Freedom of Information Act (FOIA) exempts from disclosure “trade secrets and commercial or financial information obtained from a person [that is] privileged or

confidential.”¹⁹⁸ In order for information to meet the requirements of Exemption 4, EPA must find that the information is either: (1) a trade secret, or (2) commercial or financial information that is: (a) obtained from a person, and (b) privileged or confidential. Information meeting these criteria is commonly referred to as “confidential business information” or “CBI.”¹⁹⁹

In June 2019, the U.S. Supreme Court issued its decision in *Food Marketing Institute v. Argus Leader Media*, 139 S. Ct. 2356 (2019) (*Argus Leader*). *Argus Leader* addressed the meaning of “confidential” within the context of FOIA Exemption 4. The Court held that “[a]t least where commercial or financial information is both customarily and actually treated as private by its owner and provided to the government under an assurance of privacy, the information is ‘confidential’ within the meaning of Exemption 4.”²⁰⁰ The Court identified two conditions “that might be required for information communicated to another to be considered confidential.”²⁰¹ Under the first condition, “information communicated to another remains confidential whenever it is customarily kept private, or at least closely held, by the person imparting it.”²⁰² The second condition provides that “information might be considered confidential only if the party receiving it provides some assurance that it will remain secret.”²⁰³ The Court found the first condition necessary for information to be considered confidential within the meaning of Exemption 4, but did not address whether the second condition must also be met.

Following the issuance of the Court’s opinion, the U.S. Department of Justice (DOJ) issued guidance concerning the confidentiality prong of Exemption 4, articulating “the newly

¹⁹⁸ 5 U.S.C. 552(b)(4).

¹⁹⁹ We note that CAA section 114(c) explicitly excludes emissions data from treatment as confidential information.

²⁰⁰ *Argus Leader*, 139 S. Ct. at 2366.

²⁰¹ *Id.* at 2363.

²⁰² *Id.* (internal citations omitted).

²⁰³ *Id.* (internal citations omitted).

defined contours of Exemption 4” post-*Argus Leader*.²⁰⁴ Where the Government provides an express or implied indication to the submitter prior to or at the time the information is submitted to the Government that the Government would publicly disclose the information, then the submitter generally cannot reasonably expect confidentiality of the information upon submission, and the information is not entitled to confidential treatment under Exemption 4.²⁰⁵

1. Treatment of Information Contained in Enforcement Actions and Invalid RIN Determinations

EPA has a longstanding practice of posting on its website or otherwise publicly releasing information describing fuels violations and invalid RIN determinations.²⁰⁶ Accordingly, we are proposing regulations to codify the types of information contained in fuels-related enforcement actions and invalid RIN determinations that are not entitled to confidential treatment pursuant to Exemption 4 of FOIA. This proposal covers notices of violation, settlement agreements, administrative complaints, civil complaints, criminal information, and criminal indictments related to EPA’s fuel quality and RFS regulations in 40 CFR parts 80 and 1090 and invalid RIN determinations related to EPA’s RFS regulations in 40 CFR part 80.

Since at least 2013,²⁰⁷ EPA has posted on its website or otherwise publicly released information relating to violations of the fuel quality and RFS regulations. This information

²⁰⁴ “Exemption 4 After the Supreme Court’s Ruling in *Food Marketing Institute v. Argus Leader Media* and Accompanying Step-by-Step Guide,” Office of Information Policy, U.S. DOJ, (October 4, 2019), available at <https://www.justice.gov/oip/exemption-4-after-supreme-courts-ruling-food-marketing-institute-v-argus-leader-media>.

²⁰⁵ See *id.*; see also “Step-by-Step Guide for Determining if Commercial or Financial Information Obtained from a Person is Confidential under Exemption 4 of the FOIA,” Office of Information Policy, U.S. DOJ, (updated October 7, 2019), available at <https://www.justice.gov/oip/step-step-guide-determining-if-commercial-or-financial-information-obtained-person-confidential>.

²⁰⁶ See, e.g., “Clean Air Act Fuels Settlement Information,” U.S. EPA, available at <https://www.epa.gov/enforcement/clean-air-act-fuels-settlement-information>; “Civil Enforcement of the Renewable Fuel Standard Program,” U.S. EPA, available at <https://www.epa.gov/enforcement/civil-enforcement-renewable-fuel-standard-program>.

²⁰⁷ EPA began posting RFS enforcement-related determinations and actions in 2013. See “Civil Enforcement of the Renewable Fuel Standard Program,” U.S. EPA, available at <https://www.epa.gov/enforcement/civil-enforcement-renewable-fuel-standard-program>. EPA has been posting gasoline and diesel enforcement actions for much longer.

includes the company name and identification number, the total quantity of fuel and parameter, information relating to the generation, transfer, or use of credits or RINs, and the total quantity of RINs in question. Therefore, EPA has already provided an implied indication to any submitters of such information after at least 2013 that EPA may publicly disclose such information. Accordingly, the information is not entitled to confidential treatment, and EPA intends to continue to release such information without further notice.

Through this proposal, we are also providing an express indication that such information is not entitled to confidential treatment and will be affirmatively disclosed to the public without providing further notice or process to the affected businesses. Once finalized, this rule will effectively serve as an advance confidentiality determination through rulemaking and will cover the information identified below. Except as otherwise provided, 40 CFR 2.201 through 2.215 and 2.301 do not apply to the specified information submitted under this part and 40 CFR part 1090 that is determined through this rulemaking to not qualify for confidential treatment. In particular, this proposal will impact certain information contained in EPA determinations that RINs are invalid under 40 CFR 80.1474(b)(4)(i)(C)(2) and (b)(4)(ii)(C)(2), notices of violation, settlement agreements, administrative complaints, civil complaints, criminal information, and criminal indictments. The information that EPA intends to continue release in the context of these determinations and actions includes the company name and company identification number, the facility name and facility identification number, the total quantity of fuel and parameter, information relating to the generation, transfer, or use of credits or RINs, the total quantity of RINs in question, the batch number(s) and the D codes of the RINs in question, the time period when the RINs in question were generated or when the violation occurred, and any other

See “Clean Air Act Fuels Settlement Information,” U.S. EPA, available at <https://www.epa.gov/enforcement/clean-air-act-fuels-settlement-information>.

information relevant to describing the violation at issue. We are proposing to codify this determination at 40 CFR 80.11 and 80.1402(b) as well as 40 CFR 1090.15.

Publicly disclosing this information is important in providing transparency to stakeholders and the public with respect to violations of EPA's fuel quality and RFS programs and the relief EPA is seeking to remedy those violations through its enforcement actions. Public disclosure is also important to the successful operation and integrity of the RFS program as it may prevent parties from unwittingly transferring or attempting to use invalid RINs for compliance, in contravention of the RFS regulations, or from buying invalid RINs that they will be unable to use for compliance. We seek comment on whether any additional EPA enforcement-related determinations and actions, or additional factual information relating to such determinations and actions described above should be identified as not entitled to confidential treatment. Therefore, although the public release of such information since at least 2013 constitutes an implied indication that such information is not entitled to confidential treatment, EPA is also providing an express indication that such information is not entitled to confidential treatment through this proposal.

2. Treatment of Information Contained in Requests Submitted under the RFS Program

We are proposing regulations that would help facilitate our processing of claims that RFS-related information should be withheld from public disclosure under FOIA, 5 U.S.C. 552(b)(4), as CBI. If finalized, the proposed regulations would identify certain types of RFS information collected by EPA under 40 CFR part 80, subpart M, that EPA would consider as not entitled to confidential treatment pursuant to Exemption 4 of the FOIA and that EPA will release without further notice.

We are proposing regulations that would facilitate our processing of claims that requests for information submitted under 40 CFR part 80, subpart M, should be withheld from the public under Exemption (b)(4) of the FOIA, 5 U.S.C. 552(b)(4), as CBI. If finalized, this rule would provide an express indication that we would not consider certain basic information incorporated into EPA actions on petitions and submissions, as well as that same information as it appears in the submissions to EPA under 40 CFR part 80, subpart M, to be entitled to treatment as CBI under Exemption 4 of the FOIA. In particular, this proposal would apply to all submissions to EPA under 40 CFR part 80, subpart M, including, but not limited to: SREs submitted under 40 CFR 80.1441, small refiner exemptions under 40 CFR 80.1442, pathway petitions under 40 CFR 80.1416, and compliance demonstration reports. Accordingly, if finalized, such information will be released without further notice to the submitter and without following EPA's procedures set forth in 40 CFR part 2, subpart B. We are proposing to codify this determination at 40 CFR 80.1402(c) and (d).

Through this proposal, we are providing an express indication that, after finalization of this rule, such information is not entitled to confidential treatment and will be affirmatively disclosed to the public without providing further notice to affected businesses. Once finalized, this rule will effectively serve as an advance confidentiality determination through rulemaking covering the information identified below. Except as otherwise provided, 40 CFR 2.201 through 2.215 and 2.301 do not apply to the specified information submitted under this part that is determined through this rulemaking not to qualify for confidential treatment. In particular, the information affected by this proposal is the submitter's name, the name and location of the facility, the date the submission was transmitted to EPA, any EPA-issued company or facility identification numbers associated with the submission, the general nature or purpose of the submission, and the relevant time period for the request. Additionally, for submissions making requests that EPA must adjudicate, under this proposal, once we have adjudicated the request, we will release the following information: the submitter's name; the name and location of the

facility; the date the request was transmitted to EPA; any EPA-issued company or facility identification numbers associated with the request, the general nature or purpose of the request, the relevant time period for the request, the extent to which EPA either granted or denied the request, and any relevant terms and conditions. For information submitted under 40 CFR part 80, subpart M, and not specified in the proposed regulations at 40 CFR 80.1402, EPA would continue to evaluate such CBI claims in accordance with 40 CFR part 2, subpart B.

It is appropriate to release the information described above in the interest of transparency and to provide the public with information about entities seeking exemptions or requests under part 80, subpart M. If finalized, this proposed approach would also provide certainty to submitters regarding the release of information under 40 CFR part 80, subpart M. With this advance notice, each submitter would have certainty regarding how EPA would treat the information specified above, and, as applicable, have the discretion to decide whether to make such a request with the understanding that EPA may release certain information about the request without further notice.

We seek comment on our proposal to release the aforementioned basic information about submissions and EPA's adjudication of those submissions under the RFS program.

E. Clarifying the Definition of "Agricultural Digester"

Row Q in Table 1 to 40 CFR 80.1426 makes renewable compressed natural gas, renewable liquefied natural gas, and renewable electricity eligible to generate cellulosic biofuel (D-code 3) RINs if the fuel is produced from, among other feedstocks, biogas from agricultural digesters and if the producer meets all of the other regulatory requirements under the RFS program. An agricultural digester is currently defined at 40 CFR 80.1401 as "an anaerobic digester that processes predominantly cellulosic materials, including animal manure, crop residues, and/or separated yard waste." In the preamble to the Pathways II final rule, we

explained that predominantly cellulosic materials are materials that are at least 75 percent cellulose, hemi-cellulose or lignin by mass.²⁰⁸ We received multiple questions from stakeholders asking if they could generate D3 RINs for biogas produced in a digester if materials that are not predominantly cellulosic are used in the digester. We are proposing revisions to the definition of agricultural digester to clarify that each and every material processed must be predominantly cellulosic in order for the digester to qualify as an agricultural digester under the RFS regulations. This revision does not change the existing requirements but will make it easier for the regulated community to understand the limitations on generating D3 RINs for biogas produced in anaerobic digesters.

The existing definition of agricultural digester states that the digester must process “predominantly cellulosic materials,” including animal manure, crop residues, and/or separated yard waste. The preamble to the Pathways II rule makes it clear that the term “predominantly cellulosic” means that eligible feedstocks must contain a cellulosic content of at least 75%, and that this term does not authorize renewable fuel producers to introduce non-cellulosic materials into an agricultural digester. Allowing other materials into the digester or any materials that are not at least 75 percent cellulosic would be inconsistent with the analysis underlying the rule and the definition of agricultural digester. The Pathways II rule identified agricultural digesters as a type of digester that will process wastes that are predominantly cellulosic. For the Pathways II rule we defined agricultural digesters narrowly based on the feedstocks we understood to be the most common inputs and assessed in that rulemaking, all of which we determined to be predominantly cellulosic. Thus, the ability to generate cellulosic RINs for 100 percent of the fuel produced under the pathway in row Q is predicated on the assumption and associated

²⁰⁸ The Pathways II final rule contained a list of feedstocks EPA determined are “predominately cellulosic feedstocks”: “Crop residue, slash, pre-commercial thinnings and tree residue, switchgrass, miscanthus, *Arundo donax*, *Pennisetum purpureum*, and biogas from landfills, municipal wastewater treatment facility digesters, agricultural digesters, and separated MSW digesters” (79 FR 42130-31, July 18, 2014). EPA further determined that feedstocks with minimum average adjusted cellulosic content of 75 percent, measured on a dry mass basis, were “predominantly cellulosic,” meaning fuel produced from these feedstocks would be eligible to generate 100 percent cellulosic RINs.

requirement that all the inputs to an agricultural digester are predominantly cellulosic. However, EPA does allow renewable fuel to be produced by “other waste digesters” and in some cases this fuel may qualify as cellulosic or partly cellulosic. A digester processing at least one type of material that is not at least 75 percent cellulosic content cannot be an agricultural digester and is instead an “other waste digester” under row T of Table 1 to 40 CFR 80.1426. If cellulosic material is used in an “other waste digester,” the renewable compressed natural gas would either be eligible for 100 percent D5 RINs or may be eligible to generate D3 RINs for the portion of the fuel that was demonstrated to be produced from cellulosic biomass through proper testing and D5 RINs for the rest of the fuel produced as specified at 40 CFR 80.1426(f)(15)(i)(B).

In order to clarify the materials that may be processed in an agricultural digester, we are proposing to revise the definition of agricultural digester to specify that such digesters may process “only” predominantly cellulosic materials and that “each and every material processed in an agricultural digester must be predominantly cellulosic.” These revisions are consistent with the current regulations, and the analyses undertaken for the Pathway II rule that formed the basis for the agricultural digester pathways. They are a clarification of the regulatory text, but not a change in our interpretation of our existing regulations or practice in implementing them. The revisions are meant to clarify that a digester that processes multiple feedstocks, including a material that is less than 75 percent cellulosic content is not an agricultural digester, even if the total cellulosic content of all the processed materials taken together exceeds the 75 percent threshold.

F. Definition of “Produced from Renewable Biomass”

CAA section 211(o)(1)(J) defines renewable fuel as “fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel.” In order to satisfy the definition of renewable fuel under the RFS regulations, the fuel must: (1) be “produced from renewable biomass”; (2) be “used to replace or

reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel”; and (3) have “lifecycle [GHG] emissions that are at least 20 percent less than baseline lifecycle [GHG] emissions” (unless exempted under 40 CFR 80.1403). We are proposing to define in 40 CFR 80.1401 that “produced from renewable biomass” means the energy in the finished fuel comes from renewable biomass. This definition would align the regulatory definition with our existing interpretation of the statute and regulations. We believe this definition is needed because we have received multiple questions from stakeholders on this aspect of the renewable fuel definition.

The statutory requirement that renewable fuel be produced from renewable biomass is fairly straightforward for the vast majority of renewable fuel produced under the RFS program. For example, corn starch ethanol is clearly produced from renewable biomass²⁰⁹ because essentially all of the mass, volume, and energy contained in the undenatured fuel ethanol comes from fermented corn starch. However, the application of this requirement is less clear for some fuels that are produced by co-processing multiple feedstocks. For example, some relatively new process technologies seek to produce transportation fuel by bonding carbon atoms obtained from biogenic carbon dioxide with hydrogen atoms obtained from fossil fuels. In this case, some of the mass and volume in the finished fuel may come from renewable biomass,²¹⁰ but, since carbon dioxide is not an energy carrier, all of the energy in the finished fuel would come from the fossil-based hydrogen. In these cases, we look at the existing RFS regulations to determine whether or how much of this fuel qualifies as renewable fuel.

The RFS regulations at 40 CFR 80.1426(f)(4) determine the number of gallon-RINs generated for fuel that is produced by co-processing renewable biomass and non-renewable feedstocks simultaneously to produce a fuel. The formula in the regulations states that the share

²⁰⁹ Provided the corn starch qualifies as renewable biomass (e.g., it must come from qualifying land).

²¹⁰ Provided the biogenic carbon dioxide was produced from renewable biomass (e.g., carbon dioxide from fermented corn starch).

of the fuel that is renewable is calculated as the feedstock energy from renewable biomass divided by the total feedstock energy. In the example given above, the carbon dioxide provides zero feedstock energy, so the regulations stipulate that zero RINs would be generated for the fuel. In other words, no portion of the fuel would qualify as renewable fuel. We believe this outcome is appropriate given that the fundamental purpose of transportation fuel is to provide energy, thus the source of the energy in the finished fuel should be the criterion for determining from what the fuel was produced, as opposed to the source of the mass or volume of the fuel. It is also consistent with statutory definition that renewable fuel must “be used to replace or reduce the quantity of fossil fuel present in a transportation fuel.” Fuel that derives its energy from fossil fuel (a subset of non-renewable feedstocks) is replacing one form of fossil fuel for another, not reducing the quantity of fossil fuel present in a transportation fuel.

As stated above, we have received multiple questions related to fuels that derive their energy from non-renewable feedstocks, and whether such fuels qualify as renewable fuel under the RFS program. We believe that adding this definition would reduce future confusion on this issue. In particular, we want to avoid a situation where resources may be allocated to researching or developing a new fuel technology with the hopes of generating RINs only to later find out that the fuel does not qualify because its energy does not come from renewable biomass. Thus, we propose to add a definition of “produced from renewable biomass” at 40 CFR 80.1401 that defines it as the energy in the finished fuel comes from renewable biomass. As explained above, this proposed definition is consistent with our existing interpretation of the statute and implementing regulations. We seek comment on this proposed regulatory definition.

G. Estimating Landfill Emissions for Lifecycle GHG Analysis of Fuels Produced from Separated Municipal Solid Waste

EPA has previously approved fuel pathways that use the biogenic components of separated municipal solid waste (MSW), as defined at 40 CFR 80.1426(f)(5)(i)(C), as satisfying

the 60 percent lifecycle GHG reduction for qualification as cellulosic biofuel under the RFS program (see Table 1 to 40 CFR 80.1426). Through the petition process at 40 CFR 80.1416 and engagement with stakeholders, we are aware of growing interest in the use of biogenic components of separated MSW to produce diesel, gasoline, and jet fuel. The existing separated MSW pathways were based on engineering assessments and other projections about the processes, process efficiencies and types of process energy that would be used to convert separated MSW to fuels. In some cases, there are separated MSW-to-fuel projects under consideration that likely do not fit the assumptions underlying our previous assessments. For example, our previous assessments²¹¹ were based on engineering and cost projections that separated MSW would be used as both the feedstock and the predominant source of fuel to heat the conversion process.²¹² However, some of the projects being developed intend to use natural gas for process heat fuel instead of the separated MSW itself. In such cases, the fuels produced would be unlikely to meet the 60 percent GHG reduction threshold using our existing assessment methodology. However, stakeholders have suggested that our past assessment methodology does not fully capture the full lifecycle GHG impacts of using the biogenic components of separated MSW as biofuel feedstock because it does not account for the future reductions in methane emissions from the landfills and improved recycling that may occur by diverting separated MSW from the landfill. Inclusion of change in landfill emissions could allow fuels produced from separated MSW to satisfy the 60 percent GHG reduction threshold even if the process heat comes from fossil sources. We have not estimated the GHG emissions effects of using the biogenic components of separated MSW as feedstock instead of its current fate (e.g., landfill, landfill with flaring, landfill with power generation, composting, waste to energy). Thus, we are seeking comment on the appropriateness of doing so and on the appropriate methodologies, models, and data to estimate the potential effects of diverting separated MSW from landfills.

²¹¹ 78 FR 14190 (March 5, 2013).

²¹² Kinchin, Christopher. Catalytic Fast Pyrolysis with Upgrading to Gasoline and Diesel Blendstocks. National Renewable Energy Laboratory (NREL). 2011. Docket Item No. EPA-HQ-OAR-2011-0542-0007.

Seeking comment on this topic is particularly relevant in this rulemaking because some of the projects under consideration intend to use separated MSW to produce a biocrude, which we are proposing to consider a biointermediate (see Section VII).

The concept of avoided landfill emissions is that diverting separated MSW from a landfill would reduce the subsequent GHG emissions associated with landfilling that material. When landfilled, biogenic materials decompose under anaerobic conditions and produce landfill gas composed of methane, carbon dioxide, and other gases. Landfills in the United States typically capture the landfill gas and flare it or use it to produce electricity or CNG or for other purposes. However, a share of the landfill gas evades capture or is not fully combusted by the flares and is emitted from the landfill. Since landfill gas generation is a function of the amount and biogenic content of MSW landfilled, diverting separated MSW from a landfill can reduce the overall amount of landfill GHG emissions. On the other hand, some of the biogenic MSW decomposes slowly and remains in the landfill when the landfill cell is capped, resulting in long-term carbon storage at the landfill. Combusting carbon that would otherwise be stored, in the form of transportation fuel, increases GHG emissions. The net result of all of these processes in a landfill requires modelling to estimate the effect of diverting the separated MSW on landfill emissions.

In addition to avoided methane emissions, there may be emissions reductions from enhanced recycling associated with the use of MSW as a biofuel feedstock. Using MSW as a biofuel feedstock may entail additional separation and recycling than would otherwise occur, enhancing the effectiveness of recycling efforts for metals, plastics, and potentially other materials. The reduced GHG emissions associated with recycling these additional materials as opposed to producing new metals, plastics and other materials could then provide additional GHG reduction that could be estimated and allocated to the finished fuel for purposes of lifecycle GHG analysis.

A number of models and data sources are available to estimate landfill emissions – we briefly describe a few here but this is not intended as a comprehensive list. The GREET-2020 fuel cycle model includes data and formulas to estimate the lifecycle GHG emissions associated with ethanol and CNG produced from MSW feedstock, and these data and formulas could be adapted for analysis of other MSW to fuel pathways.²¹³ The EPA Waste Reduction Model (WARM) is a tool to help solid waste planners estimate GHG emissions reductions, energy savings, and economic impacts from several different waste management practices.²¹⁴ WARM estimates avoided landfill emissions based on user inputs on MSW composition and landfill characteristics. WARM does not model pathways for manufacturing fuel from MSW. Municipal solid waste landfills report annually under EPA’s GHG reporting program based on protocols and formulas specified at 40 CFR part 98, subpart HH. Subpart HH includes formulas to estimate landfill emissions each year but does not address carbon storage at landfills or metal and plastic recycling. In 2019, the International Civil Aviation Organization (ICAO) published a methodology for calculating landfill emissions for aviation fuels produced from MSW.²¹⁵ These models and methodologies have many similarities but they differ in their intended purposes and the default assumptions they recommend for certain key inputs, such as the decay rates for certain types of biogenic MSW components and the oxidation rates for uncaptured landfill methane. Based on our review of these models, formulas and estimates we observe that the landfill emissions estimates are sensitive to inputs for key assumptions.

We seek comment on the appropriateness of accounting for changes in landfill emissions and, if appropriate, on the best available models, data, and methodologies to estimate changes in

²¹³ The Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) Model is developed and maintained by Argonne National Laboratory. <https://greet.es.anl.gov>

²¹⁴ EPA. (2019). Waste Reduction Model (WARM) Tool User’s Guide. May 2019. EPA530-R-19-002. https://www.epa.gov/sites/production/files/2020-12/documents/warm-users-guide_v15_10-29-2020.pdf

²¹⁵ ICAO. (2019). Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) Methodology for Calculating Actual Life Cycle Emissions Values. November 2019. 19 pages. <https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO%20document%2007%20-%20Methodology%20for%20Actual%20Life%20Cycle%20Emissions.pdf>

landfill emissions associated with the use of biogenic components of separated MSW as a feedstock for the production of biofuel for purposes of lifecycle GHG analysis for the RFS program. Specifically, we seek comment on the extent to which we should account for net emissions associated with changes in landfill methane emissions, landfill carbon storage, metal and plastic recycling, or other activities. In our previous assessments of landfill biogas, we used landfill gas flaring as the alternative baseline scenario (Pathways II rule, 79 FR 42141-2); in this rulemaking, we seek comment on whether there are any new data that would support using a different baseline for evaluation of using biogenic components of separate MSW as feedstock for biofuel production. Given the fact that landfill emissions can occur for decades after material is disposed, we also seek comment on the most appropriate methodology for addressing the temporal aspects of landfill emissions. In other parts of EPA's lifecycle analysis, we consider emissions over a 30-year period. We seek comment on whether a 30-year period is also appropriate for the purposes of quantifying changes in landfill emissions.

The composition of separated MSW used as biofuel feedstock has a significant impact on the potential emissions from the landfill. We seek comment on whether and how EPA should track and verify the feedstock composition if accounting for net avoided landfill emissions under the RFS program as well as changes in stored carbon. In addition, landfill emissions can differ significantly from one landfill to another based on differences in climate, management practices and other characteristics; however, evaluating individual landfills requires additional collection, tracking, and verification of data. We seek comment on whether to consider landfill emissions from individual landfills or take a more aggregated approach whereby landfills are evaluated nationally, regionally or based on a limited set of other characteristics (e.g., temperature, moisture, gas collection technology). We intend to consider the comments received on this topic as we evaluate new fuel pathway petitions, submitted pursuant to 40 CFR 80.1416, that include the use of separated MSW feedstock.

H. Technical Corrections and Clarifications

We are proposing to make numerous technical corrections to the RFS regulations. These amendments are being made to correct minor inaccuracies and updates in the current regulations. These changes are described in Table VIII.H-1 below.

Table VIII.H-1: Miscellaneous Technical Corrections and Clarifications to RFS Regulations

Part and Section of Title 40	Description of Revision
80.1401	Amended by revising the definition of “Renewable fuel” to reiterate that undenatured ethanol is not renewable fuel.
80.1401, 80.1426(f)(5)(i)–(iii), (f)(5)(iv)(A) and (B), and (f)(5)(v), 80.1450(b)(1)(vii)(A) and (B) and (b)(1)(viii), 80.1451(b)(1)(ii)(R), and 80.1454(j)	Amended by moving the definitions of “Separated yard waste,” “Separated food waste,” and “Separated municipal solid waste” from §80.1426(f)(5) to the RFS definitions section (§80.1401) and updating associated cross-references.
80.1401, 80.1426(f)(17)(i), 80.1450(b)(1)(xii), 80.1451(b)(1)(ii)(T), 80.1454(l), and 80.1468(b)	Amended by updating the incorporation by reference (IBR) for “Standard Specification for Diesel Fuel,” ASTM D975-13a, to now be ASTM D975-21, which is the most recent ASTM version.
80.1401 and 80.1468(b)	Amended by updating the IBR for “Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels,” ASTM D6751-09, to now be ASTM D6751-20a, which is the most recent ASTM version.
80.1426(f)(7)(v)(A) and 80.1468(b)	Amended by updating the IBR for “Standard Test Methods for Analysis of Wood Fuels,” ASTM E870-82(2006), to now be ASTM E870-82(2019), which is the most recent ASTM version.
80.1426(f)(7)(v)(B) and 80.1468(b)	Amended by updating the IBR for “Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials,” ASTM D4442-07, to now be ASTM D4442-20, which is the most recent ASTM version.
80.1426(f)(7)(v)(B) and 80.1468(b)	Amended by updating the IBR for “Standard Test Method for Laboratory Standardization and Calibration of Hand-Held Moisture Meters,” ASTM D4444-08, to now be ASTM D4444-13 (2018), which is the most recent ASTM version.
80.1426(f)(8)(ii)(B) and 80.1468(b)	Amended by updating the IBR for “Standard Guide for the Use of the Joint American Petroleum Institute (API) and ASTM Adjunct for Temperature and Pressure Volume Correction Factors for Generalized Crude Oils, Refined Products, and Lubricating Oils: API Manual of Petroleum Measurement Standards (MPMS) Chapter 11.1,” ASTM D1250-08, to now be ASTM D1250-19e1, which is the most recent ASTM version.

80.1426(f)(9)(ii), 80.1430(e)(2), and 80.1468(b)	Amended by updating the IBR for “Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis,” ASTM D6866-08, to now be ASTM D6866-21, which is the most recent ASTM version.
80.1426(f)(17)(i)	Amended by adding “renewable gasoline,” consistent with other related sections.
80.1426(f)(17)(i)(B)(I) and (2), 80.1450(b)(1)(xii)(B) and (C), 80.1451(b)(1)(ii)(T)(I), and 80.1454(l)(1)	Amended by replacing “diesel” with “distillate” to clarify that parties that blend renewable jet fuel with conventional jet fuel must currently comply with these requirements. This would remove perceived ambiguity over whether these provisions apply to producers of blended renewable jet fuel (jet fuel is not diesel fuel per the definition of “diesel fuel” at 40 CFR 80.2 but rather distillate fuel).
80.1428(b)(2)	Amended to be consistent with the restriction that independent third-party auditors may not own RINs under §80.1471(a)(3).
80.1429(b)(9)	Amended to limit the number of RINs that a party can separate when they incur an RVO due to redesignating certified-NTDF under §80.1408. This is consistent with similar situations involving exporters of renewable fuel or importers of gasoline and diesel fuel.
80.1450(g)(11)(ii), 80.1473(f), 80.1474(b)(2), (b)(3), (b)(4)(i)(C), and (b)(4)(ii)(C)	Amended by updating the email address for EPA’s EMTS help desk to <i>fuelsprogramsupport@epa.gov</i> .
80.1450(h)(2)(i)	Amended by changing the time for responding to EPA’s notice of intent to deactivate a company’s registration from 14 to 30 calendar days to allow additional time for company action.
80.1451(b)(1)(ii)(T)(2) and 80.1454(l)(3)	Amended to clarify reporting instructions and move the affidavit requirement from the reporting section (§80.1451) to the recordkeeping section (§80.1454).
80.1460(b)(6)	Amended to clarify that generating a RIN for fuel for which RINs have previously been generated is not a prohibited act if those RINs were generated pursuant to §80.1426(c)(6).
80.1464(a)(3)(ii), (b)(3)(ii), and (c)(2)(ii)	Amended to modify the attest engagements requirements to be consistent with the RIN activity report requirements in §80.1451(c)(2).
80.1464(a)(4)(ii), (b)(5)(ii), and (c)(3)(ii) and 80.1475(a)(2) and (d)(4)	Amended by updating outdated references to expired provisions of part 80 to part 1090.
80.1464(a)(7), (b)(8), (c)(7), (i)(1)(i), and (i)(2)(i)	Amended to add the requirement that the attest auditor verifies the submission of required compliance reports and states as a finding any compliance reports missing.
80.1464(b)(4)(i) and (iii)	Amended to modify the requirements to include verification of last date of independent third-party engineering review as occurring within the three-year cycle under §80.1450(d)(3).
80.1469(c)(1)(vii)	Amended to modify the requirements for Quality Assurance Plans to allow for a renewable fuel for which RINs were previously generated to be used as a feedstock if done in accordance with §80.1426(c)(6).

80.1471(c)	Amended to correct an erroneous reference to 31 CFR 50.5(q) to now be 31 CFR 50.4(t), and to allow comparable financial strength ratings if acceptable to EPA.
80.1475(d)(1) and (3)	Amended by correcting erroneous references to paragraph (b) to now be to paragraph (c).

IX. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at <http://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. *Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is an economically significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket. EPA prepared an analysis of potential costs and benefits associated with this action. This analysis is presented in the DRIA, available in the docket for this action.

B. *Paperwork Reduction Act (PRA)*

The information collection activities in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the PRA. The Information Collection Request (ICR) document that EPA prepared has been assigned EPA ICR number 2691.01. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The information to be collected is necessary to implement the proposed inclusion of biointermediates to the RFS program. As part of this proposal, biointermediate producers and importers would be added as respondents and certain existing respondents (e.g., renewable fuel

producers) may have additional reporting and recordkeeping requirements related to their use of biointermediates. Recordkeeping and reporting requirements include the registration of biointermediate producers and their facilities; product transfer documentation; records retention related to the production, transfer, and use of biointermediates; annual attest engagements; quality assurance plans for biointermediates; and the submission of information related to renewable fuels produced using biointermediates. These items are discussed in detail in the supporting statement in the docket.

Respondents/affected entities: Biointermediate producers, renewable fuel producers, biointermediate importers, and third parties who submit reports for these parties.

Respondent's obligation to respond: Mandatory, under 40 CFR parts 80 and 1090.

Estimated number of respondents: 1,670

Frequency of response: On occasion, daily, quarterly, or annually.

Total estimated burden: 47,988 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: \$2,828,180 (per year), all of which is purchased services, and which includes \$0 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to

OIRA_submission@omb.eop.gov, Attention: Desk Officer for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. EPA will respond to any ICR-related comments in the final rule.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule.

With respect to the proposed biointermediates provisions, we do not believe that a small biointermediate producer or renewable fuel producer would choose to take advantage of the proposed program for biointermediates unless there was sufficient economic incentive for them to do so. Current small renewable fuel producers would not be compelled to use biointermediates, and as such, any costs associated with these provisions are purely voluntary. With respect to the other proposed amendments to the RFS regulations, this action makes relatively minor corrections and modifications to those regulations. As such, we do not anticipate that there will be any significant adverse economic impact on directly regulated small entities as a result of these provisions.

The small entities directly regulated by the annual percentage standards associated with the RFS volumes are small refiners, which are defined at 13 CFR 121.201. With respect to the 2020, 2021, and 2022 percentage standards and 2022 supplemental standard, we have evaluated

the impacts on small entities from two perspectives: as if the standards were a standalone action or if they are a part of the overall impacts of the RFS program as a whole.

To evaluate the impacts of the volume requirements on small entities, we have conducted a screening analysis²¹⁶ to assess whether we should make a finding that this action will not have a significant economic impact on a substantial number of small entities. Currently available information shows that the impact on small entities from implementation of this rule will not be significant. We have reviewed and assessed the available information, which shows that obligated parties, including small entities, are generally able to recover the cost of acquiring the RINs necessary for compliance with the RFS standards through higher sales prices of the petroleum products they sell than would be expected in the absence of the RFS program.²¹⁷ This is true whether they acquire RINs by purchasing renewable fuels with attached RINs or purchase separated RINs. The costs of the RFS program are thus generally being passed on to consumers in the highly competitive marketplace. Even if we were to assume that the cost of acquiring RINs was not recovered by obligated parties, a cost-to-sales ratio test shows that the costs to small entities of the proposed RFS standards are far less than 1 percent of the value of their sales.

While the screening analysis described above supports a certification that this rule will not have a significant economic impact on small refiners, we continue to believe that it is more appropriate to consider the standards as a part of our ongoing implementation of the overall RFS program. When considered this way, the impacts of the RFS program as a whole on small entities were addressed in the RFS2 final rule, which was the rule that implemented the entire program as required by EISA 2007.²¹⁸ As such, the Small Business Regulatory Enforcement

²¹⁶ See Chapter 11 of the DRIA.

²¹⁷ For a further discussion of the ability of obligated parties to recover the cost of RINs see “Denial of Petitions for Rulemaking to Change the RFS Point of Obligation,” EPA-420-R-17-008, November 2017.

²¹⁸ 75 FR 14670 (March 26, 2010).

Fairness Act (SBREFA) panel process that took place prior to the 2010 rule was also for the entire RFS program and looked at impacts on small refiners through 2022.

For the SBREFA process for the RFS2 final rule, we conducted outreach, fact-finding, and analysis of the potential impacts of the program on small refiners, which are all described in the Final Regulatory Flexibility Analysis, located in the rulemaking docket (EPA–HQ–OAR–2005–0161). This analysis looked at impacts to all refiners, including small refiners, through the year 2022 and found that the program would not have a significant economic impact on a substantial number of small entities, and that this impact was expected to decrease over time, even as the standards increased. For gasoline and/or diesel small refiners subject to the standards, the analysis included a cost-to-sales ratio test, a ratio of the estimated annualized compliance costs to the value of sales per company. From this test, we estimated that all directly regulated small entities would have compliance costs that are less than one percent of their sales over the life of the program (75 FR 14862, March 26, 2010).

We have determined that this proposed rule will not impose any additional requirements on small entities beyond those already analyzed, since the impacts of this rule are not greater or fundamentally different than those already considered in the analysis for the RFS2 final rule assuming full implementation of the RFS program. The proposed cellulosic biofuel, advanced biofuel, and total renewable fuel volumes remain significantly below the statutory volume targets analyzed in the RFS2 final rule. Compared to the burden that would be imposed under the volumes that we assessed in the screening analysis for the RFS2 final rule (i.e., the volumes specified in the Clean Air Act), the proposed volume requirements in this rule reduce burden on small entities. Regarding the BBD standard, it is a nested standard within the advanced biofuel category, and as discussed in Section III.D, the proposed 2022 BBD volume requirement is below the volume of BBD that is anticipated to be produced and used to satisfy the advanced biofuel requirement. In other words, the volume of BBD actually used in 2022 will be driven not

by the proposed 2022 BBD standard, but rather by the proposed 2022 advanced biofuel standard, and potentially also by the total renewable fuel standard. The net result of the standards being proposed in this action is a reduction in burden as compared to implementation of the statutory volume targets assumed in the RFS2 final rule analysis.

While the rule will not have a significant economic impact on a substantial number of small entities, there are compliance flexibilities in the program that can help to reduce impacts on small entities. These flexibilities include being able to comply through RIN trading rather than renewable fuel blending, 20 percent RIN rollover allowance (up to 20 percent of an obligated party's RVO can be met using previous-year RINs), and deficit carry-forward (the ability to carry over a deficit from a given year into the following year, provided that the deficit is satisfied together with the next year's RVO). In the RFS2 final rule, we discussed other potential small entity flexibilities that had been suggested by the SBREFA panel or through comments, but we did not adopt them, in part because we had serious concerns regarding our authority to do so.

In sum, this proposed rule will not change the compliance flexibilities currently offered to small entities under the RFS program and available information shows that the impact on small entities from implementation of this rule will not be significant when viewed either from the perspective of it being a standalone action or a part of the overall RFS program. We have therefore concluded that this action will have no net regulatory burden for all directly regulated small entities.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action implements mandates specifically and explicitly set forth in CAA section 211(o), and

we believe that this action represents the least costly, most cost-effective approach to achieve the statutory requirements.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the National Government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This action will be implemented at the Federal level and affects transportation fuel refiners, blenders, marketers, distributors, importers, exporters, and renewable fuel producers and importers. Tribal governments will be affected only to the extent they produce, purchase, or use regulated fuels. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive order. This action is not subject to Executive Order 13045 because it implements specific standards established by Congress in statutes (CAA section 211(o)). While this action is not covered by Executive Order 13045, a discussion of environmental health impacts is included in Chapter 3 of the DRIA.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. This action proposes the required renewable fuel content of the transportation fuel supply for 2020, 2021, and 2022 pursuant to the CAA. The RFS program and this rule are designed to achieve positive effects on the nation’s transportation fuel supply by increasing energy independence and security.

I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This proposed action involves technical standards. We are proposing to update the existing test methods and standards in the RFS regulations to more recent versions. In accordance with the requirements of 1 CFR 51.5, we are proposing to incorporate by reference the use of test methods and standards from American Society for Testing and Materials International (ASTM International). A detailed discussion of these test methods and standards can be found in Section VIII.H. The standards and test methods may be obtained through the ASTM International website (www.astm.org) or by calling ASTM at (877) 909-2786. (ASTM E711 is referenced in the regulatory text of this proposed rule. It was approved for IBR as of July 1, 2010 and no changes are being proposed.)

ASTM International routinely updates many of its reference documents. If ASTM International publishes an updated version of any of reference documents included in this proposal, we will consider referencing that updated version in the final rule.

Table IX.I-1: Proposed Standards and Test Methods to Be Incorporated by Reference

Organization and Standard or Test Method	Description
ASTM D975-21, Standard Specification for Diesel Fuel, approved August 1, 2021	Diesel fuel specifications that must be met to qualify for RINs for renewable fuels.

ASTM D1250-19e1, Standard Guide for the Use of the Joint API and ASTM Adjunct for Temperature and Pressure Volume Correction Factors for Generalized Crude Oils, Refined Products, and Lubricating Oils: API MPMS Chapter 11.1, approved May 1, 2019	Standard guide used by industry for determining temperature corrected standardized volumes under the RFS program.
ASTM D4442-20, Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials, approved March 1, 2020	Test method used for determining moisture content of wood samples that must be met when qualifying for RINs for renewable fuels.
ASTM D4444-13 (2018), Standard Test Method for Laboratory Standardization and Calibration of Hand-Held Moisture Meters, reapproved July 1, 2018	Test method used for determining moisture content of wood samples that must be met when qualifying for RINs for renewable fuels.
ASTM D6751-20a, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, approved August 1, 2020	Biodiesel fuel specifications that must be met to qualify for RINs for renewable fuels.
ASTM D6866-21, Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis, approved January 15, 2021	Radiocarbon dating test method to determine the renewable content of transportation fuel.
ASTM E870-82 (2019), Standard Test Methods for Analysis of Wood Fuels, reapproved April 1, 2019	Test method that covers the proximate and ultimate analysis of wood fuels, as well as the determination of the gross caloric value of wood sampled and prepared by prescribed test methods and analyzed according to ASTM established procedures that must be met when qualifying for RINs for renewable fuels.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Due to time constraints and uncertainty about where impacts are likely to occur, EPA is able to evaluate only qualitatively the extent to which this action may result in disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). While there is the potential for significant GHG emission reductions as a result of this action, changes in air and water quality could occur due to increases in ethanol or biodiesel production. Land use change to bring more corn, soy, or other crops into production in response to the action could also affect air, water, and soil quality in specific locations. The

extent to which such changes – as well as future climate change impacts - may be unevenly distributed spatially in ways that coincide with patterns of pre-existing exposure and vulnerabilities for minority populations, low-income populations, and/or indigenous peoples is uncertain and would require predicting where these changes would occur on a fine spatial scale. A summary of our approach for considering potential EJ concerns as a result of this action can be found in Section I.I, and our EJ analysis (including a discussion of this action’s potential impacts on GHGs, air quality, water quality, and fuel and food prices) can be found in Chapter 8 of the DRIA, available in the docket for this action.

X. Statutory Authority

Statutory authority for this action comes from sections 114, 203-05, 208, 211, and 301 of the Clean Air Act, 42 U.S.C. sections 7414, 7522-24, 7542, 7545, and 7601.

List of Subjects

40 CFR Part 80

Environmental protection, Administrative practice and procedure, Air pollution control, Diesel fuel, Fuel additives, Gasoline, Imports, Incorporation by reference, Oil imports, Petroleum, Renewable fuel.

40 CFR Part 1090

Environmental protection, Administrative practice and procedure, Air pollution control, Diesel fuel, Fuel additives, Gasoline, Imports, Oil imports, Petroleum, Renewable fuel.

Michael S. Regan,

Administrator.

For the reasons set forth in the preamble, EPA proposes to amend 40 CFR parts 80 and 1090 as follows:

PART 80—REGULATION OF FUELS AND FUEL ADDITIVES

1. The authority citation for part 80 continues to read as follows:

Authority: 42 U.S.C. 7414, 7521, 7542, 7545, and 7601(a).

Subpart A—General Provisions

2. Add §80.11 to read as follows:

§80.11 Confidentiality of information.

(a) Except as specified in paragraph (b) of this section, information obtained by the Administrator or his representatives pursuant to this part shall be treated, in so far as its confidentiality is concerned, in accordance with the provisions of 40 CFR part 2, subpart B.

(b) Information contained in EPA notices of violation, settlement agreements, administrative complaints, civil complaints, criminal information, and criminal indictments is not entitled to confidential treatment and therefore EPA may publicly disclose such information. Such information includes the company name and EPA-issued company identification number, the facility name and EPA-issued facility identification number, the total quantity of fuel and parameter, the time or time period when the violation occurred, information relating to the generation, transfer, or use of credits, and any other information relevant to describing the violation.

Subpart M—Renewable Fuel Standard

3. Amend §80.1401 by:

- a. Revising the definitions of “Agricultural digester” and “Baseline volume”;
- b. Adding in alphabetical order the definition of “Biocrude”;
- c. Revising the definition of “Biodiesel”;
- d. Adding in alphabetical order the definitions of “Biointermediate,” “Biointermediate import facility,” “Biointermediate importer,” “Biointermediate producer,” and “Biointermediate production facility”;
- e. Revising the definitions of “Combined heat and power (CHP),” “Co-processed,” “Facility,” and “Foreign renewable fuel producer”;
- f. Adding in alphabetical order the definition of “Free fatty acid (FFA) feedstock”;
- g. Revising paragraph (1) in the definition of “Non-ester renewable diesel” and the definition of “Non-renewable feedstock”;
- h. Adding in alphabetical order the definition of “Produced from renewable biomass”;
- i. Revising the definitions of “Quality assurance audit,” “Quality assurance plan,” paragraph (7) in the definition of “Renewable biomass,” the introductory text and paragraph (1)(i) in the definition of “Renewable fuel”; and
- j. Adding in alphabetical order the definitions of “Separated food waste,” “Separated municipal solid waste (MSW),” “Separated yard waste,” and “Undenatured ethanol”.

The revisions and additions read as follows:

§80.1401 Definitions.

* * * * *

Agricultural digester means an anaerobic digester that processes only animal manure, crop residues, or separated yard waste with an adjusted cellulosic content of at least 75%. Each and every material processed in an agricultural digester must have an adjusted cellulosic content of at least 75%.

* * * * *

Baseline volume means the permitted capacity or, if permitted capacity cannot be determined, the actual peak capacity or nameplate capacity as applicable pursuant to §80.1450(b)(1)(v)(A) through (C), of a specific renewable fuel production facility on a calendar year basis.

Biocrude means a liquid biointermediate produced from renewable biomass through gasification or pyrolysis at a biointermediate production facility to be used to produce renewable fuel at a refinery as defined in 40 CFR 1090.80.

Biodiesel means a mono-alkyl ester that meets ASTM D6751 (incorporated by reference, see §80.1468).

* * * * *

Biointermediate means any feedstock material that is used to produce renewable fuel and meets all of the following requirements:

- (1) It is derived from renewable biomass.
- (2) It does not meet the definition of renewable fuel in this section and RINs were not generated for it as a renewable fuel in its own right.
- (3) It is produced at a facility registered with EPA that is different than the facility at which it is used to produce renewable fuel.
- (4) It is made from the feedstock and will be used to produce the renewable fuel in accordance with the process(es) listed in the approved pathway (as described in table 1 to §80.1426 or a pathway approval pursuant to §80.1416) that the biointermediate producer and renewable fuel producer are using to convert renewable biomass to renewable fuel.

(5) Is one of the following:

(i) Biocrude.

(ii) Free fatty acid (FFA) feedstock.

(iii) Undenatured ethanol feedstock.

(6) A feedstock listed in a pathway in Table 1 to §80.1426, or in an approved pathway petition under §80.1416, and used to produce the renewable fuel specified in that pathway or approved petition using the specified process requirements, as applicable, is not a biointermediate.

Biointermediate import facility means any facility as defined in 40 CFR 1090.80 where a biointermediate is imported from outside the covered location into the covered location.

Biointermediate importer means any person who owns, leases, operates, controls, or supervises a biointermediate import facility.

Biointermediate producer means any person who owns, leases, operates, controls, or supervises a biointermediate production facility.

Biointermediate production facility means all of the activities and equipment associated with the production of a biointermediate starting from the point of delivery of feedstock material to the point of final storage of the end biointermediate product, which are located on one property, and are under the control of the same person (or persons under common control).

* * * * *

Combined heat and power (CHP), also known as cogeneration, refers to industrial processes in which waste heat from the production of electricity is used for process energy in a biointermediate or renewable fuel production facility.

* * * *

Co-processed means that renewable biomass or a biointermediate was simultaneously processed with fossil fuels or other non-renewable feedstock in the same unit or units to produce a fuel that is partially derived from renewable biomass or a biointermediate.

* * * *

Facility means all of the activities and equipment associated with the production of renewable fuel or a biointermediate starting from the point of delivery of feedstock material to the point of final storage of the end product, which are located on one property, and are under the control of the same person (or persons under common control).

* * * *

Foreign renewable fuel producer means a person from a foreign country or from an area outside the covered locations who produces renewable fuel for use in transportation fuel, heating oil, or jet fuel. Foreign ethanol producers are considered foreign renewable fuel producers.

* * * *

Free fatty acid (FFA) feedstock means a biointermediate that is composed of at least 80 percent free fatty acids that are separated from renewable biomass. FFA feedstock must not include any free fatty acids from the refining of crude palm oil.

* * * *

Non-ester renewable diesel * * *

(1) A fuel or fuel additive that meets the ASTM D975 (incorporated by reference, see §80.1468) Grade No. 1-D or No. 2-D specifications and can be used in an engine designed to operate on conventional diesel fuel; or

* * * * *

Non-renewable feedstock means a feedstock (or any portion thereof) that does not meet the definition of renewable biomass or biointermediate in this section.

* * * * *

Produced from renewable biomass means that the energy in the finished fuel or biointermediate comes from renewable biomass.

* * * * *

Quality assurance audit means an audit of a renewable fuel production facility or biointermediate production facility conducted by an independent third-party auditor in accordance with a QAP that meets the requirements of §§80.1469, 80.1472, and 80.1477.

Quality assurance plan, or QAP, means the list of elements that an independent third-party auditor will check to verify that the RINs generated by a renewable fuel producer or importer are valid or to verify the appropriate production of a biointermediate. A QAP includes both general and pathway specific elements.

* * * * *

Renewable biomass * * *

(7) Separated yard waste or food waste, including recycled cooking and trap grease.

* * * * *

Renewable fuel means a fuel that meets all of the requirements of paragraph (1) and (2) of this definition:

(1)(i) Fuel that is produced from renewable biomass or a biointermediate produced from renewable biomass.

* * * * *

Separated food waste means a feedstock stream consisting of food waste kept separate since generation from other waste materials, and which includes food and beverage production waste and post-consumer food and beverage waste.

Separated municipal solid waste (MSW) means material remaining after separation actions have been taken to remove recyclable paper, cardboard, plastics, rubber, textiles, metals, and glass from municipal solid waste, and which is composed of both cellulosic and non-cellulosic materials.

Separated yard waste means a feedstock stream consisting of yard waste kept separate since generation from other waste materials.

* * * * *

Undenatured ethanol means ethanol that has not been denatured as required in 27 CFR parts 19 through 21. Undenatured ethanol is not renewable fuel.

* * * * *

4. Amend §80.1402 by removing the second sentence in paragraph (a) and adding paragraphs (b) through (f) to read as follows:

§80.1402 Availability of information; confidentiality of information.

* * * * *

(b) Information contained in EPA determinations that RINs are invalid under §80.1474(b)(4)(i)(C)(2) and (b)(4)(ii)(C)(2), notices of violation, settlement agreements, administrative complaints, civil complaints, criminal information, and criminal indictments under the Renewable Fuel Standard (RFS) program is not entitled to confidential treatment and therefore EPA may publicly disclose such information. Such information includes the company name and company identification number of the party that produced the fuel or generated the RINs in question, the facility name and facility identification number of the facility at which the fuel associated with the RINs in question was allegedly produced or imported, the total quantity of fuel and RINs in question, the time period when the fuel was allegedly produced, the time period when the RINs in question were generated, the batch number(s) and the D code(s) of the RINs in question, information relating to the generation, transfer, or use of RINs, and any other information relevant to describing the violation.

(c) The following information contained in submissions under this subpart is not entitled to confidential treatment and, except as otherwise provided, the provisions of 40 CFR part 2, subpart B, do not apply:

(1) Submitter's name.

(2) The name and location of the facility, if applicable.

(3) The date the submission was transmitted to EPA.

(4) Any EPA-issued company or facility identification numbers associated with the request.

(5) The purpose of the submission.

(6) The relevant time period for the request, if applicable.

(d) The following information incorporated into EPA determinations on submissions under this subpart is not entitled to confidential treatment and, except as otherwise provided, the provisions of 40 CFR part 2, subpart B, do not apply:

(1) Submitter's name.

(2) The name and location of the facility, if applicable.

(3) The date the submission was transmitted to EPA.

(4) Any EPA-issued company or facility identification numbers associated with the request.

(5) The purpose of the submission.

(6) The relevant time period of the request, if applicable.

(7) The extent to which EPA either granted or denied the request and any relevant terms and conditions.

(e) Except as otherwise specified in this section, any information submitted under this part claimed as confidential remains subject to evaluation by EPA under 40 CFR part 2, subpart B.

(f) EPA may disclose the information specified in paragraphs (a) through (d) of this section on its website, or otherwise make it available to interested parties, without additional notice or process, notwithstanding any claims that the information is entitled to confidential treatment under 40 CFR part 2, subpart B.

5. Amend §80.1405 by revising paragraph (a)(11), adding paragraphs (a)(12) and (13), and revising the equations in paragraph (c) to read as follows:

§80.1405 What are the Renewable Fuel Standards?

(a) * * *

(11) *Renewable Fuel Standards for 2020.* (i) The value of the cellulosic biofuel standard for 2021 shall be 0.32 percent.

(ii) The value of the biomass-based diesel standard for 2021 shall be 2.37 percent.

(iii) The value of the advanced biofuel standard for 2021 shall be 2.91 percent.

(iv) The value of the renewable fuel standard for 2021 shall be 10.78 percent.

(12) *Renewable Fuel Standards for 2021.* (i) The value of the cellulosic biofuel standard for 2021 shall be 0.36 percent.

(ii) The value of the biomass-based diesel standard for 2021 shall be 2.19 percent.

(iii) The value of the advanced biofuel standard for 2021 shall be 3.03 percent.

(iv) The value of the renewable fuel standard for 2021 shall be 10.79 percent.

(13) *Renewable Fuel Standards for 2022.* (i) The value of the cellulosic biofuel standard for 2022 shall be 0.44 percent.

(ii) The value of the biomass-based diesel standard for 2022 shall be 2.42 percent.

(iii) The value of the advanced biofuel standard for 2022 shall be 3.27 percent.

(iv) The value of the renewable fuel standard for 2022 shall be 11.76 percent.

(v) The value of the supplemental renewable fuel standard for 2022 shall be 0.14 percent.

* * * * *

(c) * * *

$$Std_{CB,i} = 100 \times \frac{RFV_{CB,i}}{(G_i - RG_i) + (GS_i - RGS_i) - GE_i + (D_i - RD_i) + (DS_i - RDS_i) - DE_i}$$

$$Std_{BBD,i} = 100 \times \frac{RFV_{BBD,i} \times 1.55}{(G_i - RG_i) + (GS_i - RGS_i) - GE_i + (D_i - RD_i) + (DS_i - RDS_i) - DE_i}$$

$$Std_{AB,i} = 100 \times \frac{RFV_{AB,i}}{(G_i - RG_i) + (GS_i - RGS_i) - GE_i + (D_i - RD_i) + (DS_i - RDS_i) - DE_i}$$

$$Std_{RF,i} = 100 \times \frac{RFV_{RF,i}}{(G_i - RG_i) + (GS_i - RGS_i) - GE_i + (D_i - RD_i) + (DS_i - RDS_i) - DE_i}$$

* * * * *

6. Amend §80.1407 by revising paragraph (f)(1) to read as follows:

§80.1407 How are the Renewable Volume Obligations calculated?

* * * * *

(f) * * *

(1) Any renewable fuel as defined in §80.1401. Renewable fuel for which a RIN is determined to be invalidly generated under §80.1431 may not be excluded from a party's Renewable Volume Obligations.

* * * * *

§80.1408 [Amended]

7. Amend §80.1408 by, in paragraphs (a)(2)(i)(B) and (a)(2)(ii)(B), removing “§80.1454(t)” and adding “§80.1454(o)” in its place.

8. Amend §80.1415 by revising paragraphs (c)(2)(ii) and (iii) to read as follows:

§80.1415 How are equivalence values assigned to renewable fuel?

* * * * *

(c) * * *

(2) * * *

(ii) For each feedstock, biointermediate, component, or additive that is used to make the renewable fuel, provide a description, the percent input, and identify whether or not it is renewable biomass or is derived from renewable biomass.

(iii) For each feedstock or biointermediate that also qualifies as a renewable fuel, state whether or not RINs have been previously generated for such feedstock.

* * * * *

9. Amend §80.1416 by revising paragraphs (b)(1)(ii) and (iii) to read as follows:

§80.1416 Petition process for evaluation of new renewable fuels pathways.

* * * * *

(b)(1) * * *

(ii) A technical justification that includes a description of the renewable fuel, feedstock(s), and biointermediate(s) used to make it, and the production process. The justification must include process modeling flow charts.

(iii) A mass balance for the pathway, including feedstocks and biointermediates, fuels produced, co-products, and waste materials production.

* * * * *

10. Amend §80.1426 by:

- a. Adding paragraphs (a)(4);
- b. Removing the headings from paragraphs (c)(2) and (3);
- c. Adding paragraph (c)(8);
- d. Removing paragraph (f)(1) introductory text;
- e. Adding paragraph (f)(1) heading and paragraphs (f)(1)(i) through (vi) prior to Table 1 to § 80.1426;
- f. Redesignating paragraph (f)(3)(vi) as paragraph (f)(3)(vi)(A);
- g. In newly redesignated paragraph (f)(3)(vi)(A):
 - i. Revising the introductory text and the definitions of “FE₃,” “FE₄,” “FE₅,” “FE₆,” and “FE₇” following Table 4 to § 80.1426; and
 - ii. Designating the undesignated text following the definition of “FE₇” as paragraph (f)(3)(vi)(B);

- h. In newly designated paragraph (f)(3)(vi)(B), revising the definitions of “FE,” “M,” “m,” “CF,” and “E”;
- i. Revising the paragraph (f)(4) heading;
- j. Revising the definitions of “FE_R” and “FE_{NR}” in paragraph (f)(4)(i)(A)(I);
- k. Adding paragraph (f)(4)(iv);
- l. Revising paragraphs (f)(5) heading, (f)(5)(i) and (ii), (f)(5)(iii) introductory text, (f)(5)(iv)(A) introductory text, (f)(5)(iv)(B) introductory text, (f)(5)(v) introductory text, (f)(7)(v)(A) and (B), (f)(8)(ii)(B), (f)(9)(ii), (f)(15)(i) introductory text, (f)(16)(iii);
- m. Adding paragraph (f)(17) heading; and
- n. Revising paragraphs (f)(17)(i) introductory text and (f)(17)(i)(B)(I) and (2).

The additions and revisions read as follows:

§80.1426 How are RINs generated and assigned to batches of renewable fuel?

(a) * * *

(4) Where a feedstock or biointermediate is used to produce renewable fuel and is not entirely renewable biomass, RINs may only be generated for the portion of fuel that is derived from renewable biomass, as calculated under paragraph (f)(4) of this section.

* * * * *

(c) * * *

(8) RINs must not be generated for a biointermediate.

* * * * *

(f) * * *

(1) *Applicable pathways.* (i) D codes shall be used in RINs generated by producers or importers of renewable fuel according to the pathways listed in Table 1 to this section, paragraph (f)(6) of this section, or as approved by the Administrator.

(ii) In choosing an appropriate D code, producers and importers may disregard any incidental, *de minimis* feedstock contaminants that are impractical to remove and are related to customary feedstock production and transport.

(iii) Tables 1 and 2 to this section do not apply to, and impose no requirements with respect to, volumes of fuel for which RINs are generated pursuant to paragraph (f)(6) of this section.

(iv) Pathways in Table 1 to this section and advanced technologies in Table 2 to this section also apply in cases where the renewable fuel producer is using a biointermediate.

(v) For the purposes of identifying the appropriate pathway in Table 1 to this section, biointermediates used for the production of renewable fuel are considered to be equivalent to the renewable biomass from which they were derived, with the following exceptions:

(A) Oil that is physically separated from any woody or herbaceous biomass and used to produce renewable fuel shall not generate D-code 3 or 7 RINs.

(B) Sugar or starch that is physically separated from cellulosic biomass and used to produce renewable fuel shall not generate D-code 3 or 7 RINs.

(vi) If a renewable fuel producer uses a biointermediate for the production of renewable fuel, additional requirements apply to both the renewable fuel producer and the biointermediate producer as described in §80.1476.

* * * *

(3) * * *

(vi)(A) If a producer produces a single type of renewable fuel using two or more different feedstocks or biointermediates which are processed simultaneously, and each batch is comprised of a single type of fuel, then the number of gallon-RINs that shall be generated for a batch of renewable fuel and assigned a particular D code shall be determined according to the formulas in Table 4 to this section.

* * * *

FE_3 = Feedstock energy from all feedstocks or biointermediates whose pathways have been assigned a D code of 3 under Table 1 to this section, or a D code of 3 as approved by the Administrator, in Btu.

FE_4 = Feedstock energy from all feedstocks or biointermediates whose pathways have been assigned a D code of 4 under Table 1 to this section, or a D code of 4 as approved by the Administrator, in Btu.

FE_5 = Feedstock energy from all feedstocks or biointermediates whose pathways have been assigned a D code of 5 under Table 1 to this section, or a D code of 5 as approved by the Administrator, in Btu.

FE₆ = Feedstock energy from all feedstocks or biointermediates whose pathways have been assigned a D code of 6 under Table 1 to this section, or a D code of 6 as approved by the Administrator, in Btu.

FE₇ = Feedstock energy from all feedstocks or biointermediates whose pathways have been assigned a D code of 7 under Table 1 to this section, or a D code of 7 as approved by the Administrator, in Btu.

(B) * * *

FE = Feedstock or biointermediate energy, in Btu.

M = Mass of feedstock or biointermediate, in pounds, measured on a daily or per-batch basis.

m = Average moisture content of the feedstock or biointermediate, in mass percent.

CF = Converted Fraction in annual average mass percent, except as otherwise provided by §80.1451(b)(1)(ii)(U), representing that portion of the feedstock or biointermediate that is converted into renewable fuel by the producer.

E = Energy content of the components of the feedstock or biointermediate that are converted to renewable fuel, in annual average Btu/lb, determined according to paragraph (f)(7) of this section.

*(4) Renewable fuel that is produced by co-processing renewable biomass (including a biointermediate) and non-renewable feedstocks simultaneously to produce a fuel that is partially renewable. (i) * * **

(A) * * *

(I) * * *

FE_R = Feedstock energy from renewable biomass (including the renewable portion of a biointermediate) used to make the transportation fuel, in Btu.

FE_{NR} = Feedstock energy from non-renewable feedstocks (including the non-renewable portion of a biointermediate) used to make the transportation fuel, heating oil, or jet fuel, in Btu.

* * * * *

(iv) In determining the RIN volume V_{RIN} for co-processed fuels produced from a biointermediate, RIN-generating parties must use Method B as described in paragraph (f)(4)(i)(B) of this section and calculate the renewable fraction of a fuel R using Method B of ASTM D6866 (incorporated by reference, see §80.1468) as described in paragraph (f)(9)(ii) of this section.

(5) Renewable fuel produced from separated yard waste, separated food waste, and separated MSW. (i)(A) Separated yard waste is deemed to be composed entirely of cellulosic materials.

(B) Separated food waste is deemed to be composed entirely of non-cellulosic materials, unless a party demonstrates that a portion of the feedstock is cellulosic through approval of their facility registration.

(ii)(A) A feedstock qualifies as separated yard waste or separated food waste only if it is collected according to a plan submitted to and accepted by EPA under the registration procedures specified in §80.1450(b)(1)(vii).

(B) A feedstock qualifies as separated MSW only if it is collected according to a plan submitted to and approved by EPA.

(iii) Separation and recycling actions for separated MSW are considered to occur if:

* * * * *

(iv)(A) The number of gallon-RINs that shall be generated for a batch of renewable fuel derived from separated yard waste shall be equal to a volume V_{RIN} and is calculated according to the following formula:

* * * * *

(B) The number of gallon-RINs that shall be generated for a batch of renewable fuel derived from separated food waste shall be equal to a volume V_{RIN} and is calculated according to the following formula:

* * * * *

(v) The number of cellulosic biofuel gallon-RINs that shall be generated for the cellulosic portion of a batch of renewable fuel derived from separated MSW shall be determined according to the following formula:

* * * * *

(7) * * *

(v) * * *

(A) ASTM E870 or ASTM E711 for gross calorific value (both incorporated by reference, see §80.1468).

(B) ASTM D4442 or ASTM D4444 for moisture content (both incorporated by reference, see §80.1468).

* * * * *

(8) * * *

(ii) * * *

(B) The standardized volume of biodiesel at 60 °F, in gallons, as calculated from the use of the American Petroleum Institute Refined Products Table 6B, as referenced in ASTM D1250 (incorporated by reference, see §80.1468).

* * * * *

(9) * * *

(ii) Parties must use Method B or Method C of ASTM D6866 (incorporated by reference, see §80.1468), or an alternative test method as approved by EPA.

* * * * *

(15) * * *

(i) If a producer seeking to generate D code 3 or D code 7 RINs produces a single type of renewable fuel using two or more feedstocks or biointermediates converted simultaneously, and at least one of the feedstocks or biointermediates does not have a minimum 75% average adjusted cellulosic content, one of the following additional requirements apply:

* * * * *

(16) * * *

(iii) Recordkeeping requirements under §80.1454(n).

(17) *Qualifying use demonstration for certain renewable fuels.* (i) For purposes of this section, any renewable fuel other than ethanol, biodiesel, renewable gasoline, or renewable diesel that meets the ASTM D975 Grade No. 1-D or No. 2-D specifications (incorporated by reference, see §80.1468) is considered renewable fuel and the producer or importer may generate RINs for such fuel only if all of the following apply:

* * * * *

(B) * * *

(1) Blending the renewable fuel into gasoline or distillate fuel to produce a transportation fuel, heating oil, or jet fuel that meets all applicable standards under this part and 40 CFR part 1090.

(2) Entering into a written contract for the sale of the renewable fuel, which specifies the purchasing party must blend the fuel into gasoline or distillate fuel to produce a transportation fuel, heating oil, or jet fuel that meets all applicable standards under this part and 40 CFR part 1090.

* * * * *

11. Amend §80.1428 by revising paragraph (b)(2) to read as follows:

§80.1428 General requirements for RIN distribution.

* * * * *

(b) * * *

(2) Unless otherwise specified, any person that has registered pursuant to §80.1450 can own a separated RIN.

* * * * *

12. Amend §80.1429 by revising paragraph (b)(9) introductory text to read as follows:

§80.1429 Requirements for separating RINs from volumes of renewable fuel.

* * * * *

(b) * * *

(9) Except as provided in paragraphs (b)(2) through (5) and (8) of this section, parties whose non-export renewable volume obligations are solely related to the importation of products listed in §80.1407(c) or (e), the addition of blendstocks into a volume of finished gasoline, finished diesel fuel, or BOB, or that incur a renewable volume obligation (RVO) under §80.1408, can only separate RINs from volumes of renewable fuel if the number of gallon-RINs separated in a calendar year is less than or equal to a limit set as follows:

* * * * *

13. Amend §80.1430 by revising paragraph (e)(2) to read as follows:

§80.1430 Requirements for exporters of renewable fuels.

* * * * *

(e) * * *

(2) Determination of the renewable portion of the blend using Method B or Method C of ASTM D6866 (incorporated by reference, see §80.1468), or an alternative test method as approved by the EPA.

* * * * *

14. Amend §80.1431 by adding paragraph (a)(3) to read as follows:

§80.1431 Treatment of invalid RINs.

(a) * * *

(3) In the event that EPA determines that any RIN generated for a batch of renewable fuel produced using a biointermediate is invalid, then all RINs generated for that batch of renewable fuel are deemed invalid, unless EPA in its sole discretion determines that some portion of those RINs are valid.

* * * * *

§80.1435 [Amended]

15. Amend §80.1435 by, in paragraph (a)(4), removing “§80.1454(u)” and adding “§80.1454(p)” in its place.

16. Amend §80.1449 by revising paragraph (a)(4)(iii) to read as follows:

§80.1449 What are the Production Outlook Report requirements?

(a) * * *

(4) * * *

(iii) Feedstocks, biointermediates, and production processes to be used at each production facility.

* * * * *

17. Amend §80.1450 by:

- a. Revising paragraphs (b) introductory text, (b)(1) introductory text, (b)(1)(i), and (b)(1)(ii) introductory text;
- b. Adding paragraph (b)(1)(ii)(B); and
- c. Revising paragraphs (b)(1)(iii), (b)(1)(iv)(A)(*I*) and (2), (b)(1)(iv)(B)(3), (b)(1)(v)(B) and (C), (b)(1)(vii)(A) introductory text, (b)(1)(vii)(B) introductory text, (b)(1)(viii) introductory text, (b)(1)(viii)(B)(*I*) through (3), (b)(1)(xii) introductory text, (b)(1)(xii)(B), (b)(1)(xii)(C) introductory text, (b)(1)(xiii)(A), (b)(1)(xiii)(B) introductory text, (b)(1)(xiii)(B)(*I*) and (5), (b)(1)(xv) introductory text, (b)(2)(i)(A) and (B), (b)(2)(ii)(A) through (C), (b)(2)(iv), and (d);
- d. Adding paragraph (g) heading; and
- e. Revising the second sentence of paragraph (g) introductory text, paragraphs (g)(5) through (7) and (9) and (g)(10)(ii), the second sentence of paragraph (g)(11)(ii), (h)(1)(i), and the last sentence of paragraph (h)(2)(i).

The revisions and additions read as follows:

§80.1450 What are the registration requirements under the RFS program?

* * * * *

(b) *Producers*. Any RIN-generating foreign producer, any non-RIN-generating foreign producer, any domestic renewable fuel producer that generates RINs, or any biointermediate producer that transfers any biointermediate for the production of a renewable fuel for RIN generation, must provide EPA the information specified under 40 CFR 1090.805 if such information has not already been provided under the provisions of this part, and must receive EPA-issued company and facility identification numbers prior to the generation of any RINs for their fuel or for fuel made with their ethanol, or prior to the transfer of any biointermediate to be

used in the production of a renewable fuel for which RINs may be generated. Unless otherwise specifically indicated, all the following registration information must be submitted and accepted by EPA 60 days prior to the generation of RINs or the transfer of any biointermediate to be used in the production of a renewable fuel for which RINs may be generated.

(1) A description of the types of renewable fuels, ethanol, or biointermediates that the producer intends to produce at the facility and that the facility is capable of producing without significant modifications to the existing facility. For each type of renewable fuel, ethanol, or biointermediate the renewable fuel producer or foreign ethanol producer must also provide all the following:

(i)(A) A list of all the feedstocks and biointermediates the facility intends to utilize without significant modification to the existing facility.

(B) A description of the type(s) of renewable biomass that will be used as feedstock material to produce the biointermediate, if applicable.

(C) A list of the EPA-issued company and facility registration numbers of all biointermediate producers and biointermediate production facilities that will supply biointermediates for renewable fuel production.

(ii) A description of the facility's renewable fuel, ethanol, or biointermediate production processes, including:

* * * * *

(B) For registrations indicating the production of any biointermediate, the biointermediate producer must provide all of the following:

(1) For each biointermediate production facility, the company name, EPA company registration number, and EPA facility registration number of the renewable fuel producer and renewable fuel production facility at which the biointermediate produced from the biointermediate production facility will be transferred and used.

(2) Copies of documents and corresponding calculations demonstrating production capacity of each biointermediate produced at the biointermediate production facility.

(3) For each type of feedstock that the biointermediate producer intends to process the biointermediate producer must provide all the following:

(i) A list of all the feedstocks the facility intends to utilize without significant modification to the existing facility.

(ii) A description of the type(s) of renewable biomass that will be used as feedstock material to produce the biointermediate.

(4) The pathway(s) in Table 1 to §80.1426 or the approved pathway under §80.1416 that the biointermediate could be used in to produce renewable fuel.

(iii) The type(s) of co-products produced with each type of renewable fuel, ethanol, or biointermediate.

(iv) * * *

(A) * * *

(1) Each type of process heat fuel used at the facility to produce the renewable fuel, ethanol, or biointermediate.

(2) The name and address of the company supplying each process heat fuel to the renewable fuel facility, foreign ethanol facility, or biointermediate production facility.

(B) * * *

(3) An affidavit from the biogas supplier stating its intent to supply biogas to the renewable fuel producer, foreign ethanol producer, or biointermediate producer, and the quantity and energy content of the biogas that it intends to provide to the renewable fuel producer or foreign ethanol producer.

(v) * * *

(B) For facilities claiming the exemption described in §80.1403(c) or (d):

(I) Applicable air permits issued by EPA, state, local air pollution control agencies, or foreign governmental agencies that govern the construction and/or operation of the renewable fuel facility that were:

(i) Issued or revised no later than December 19, 2007, for facilities described in §80.1403(c); or

(ii) Issued or revised no later than December 31, 2009, for facilities described in §80.1403(d).

(2) If the air permits specified in paragraph (b)(1)(v)(B)(I) of this section do not specify the maximum rated annual volume output of renewable fuel, copies of documents demonstrating the facility's actual peak capacity.

(C) For facilities not claiming the exemption described in §80.1403(c) or (d) and that are exempt from air permit requirements or for which the maximum rated annual volume output of

renewable fuel is not specified in their air permits, appropriate documentation demonstrating the facility's actual peak capacity or nameplate capacity.

* * * * *

(vii)(A) For a renewable fuel producer, foreign ethanol producer, or biointermediate producer using separated yard waste:

* * * * *

(B) For a renewable fuel producer, foreign ethanol producer, or biointermediate producer using separated food waste:

* * * * *

(viii) For a renewable fuel producer, foreign ethanol producer, or biointermediate producer using separated municipal solid waste:

* * * * *

(B) * * *

(1) Extent and nature of recycling that occurred prior to receipt of the waste material by the renewable fuel producer, foreign ethanol producer, or biointermediate producer;

(2) Identification of available recycling technology and practices that are appropriate for removing recycling materials from the waste stream by the fuel producer, foreign ethanol producer, or biointermediate producer; and

(3) Identification of the technology or practices selected for implementation by the fuel producer, foreign ethanol producer, or biointermediate producer including an explanation for such selection, and reasons why other technologies or practices were not.

* * * * *

(xii) For a producer or importer of any renewable fuel other than ethanol, biodiesel, renewable gasoline, renewable diesel that meets the ASTM D975 Grade No. 1-D or No. 2-D specifications (incorporated by reference, see §80.1468), biogas, or renewable electricity, all the following:

* * * * *

(B) A statement regarding whether the renewable fuel producer or importer will blend the renewable fuel into gasoline or diesel fuel or enter into a written contract for the sale and use of a specific quantity of the renewable fuel with a party who blends the fuel into gasoline or distillate fuel to produce a transportation fuel, heating oil, or jet fuel that meets all applicable standards under this part and 40 CFR part 1090.

(C) If the renewable fuel producer or importer enters into a written contract for the sale and use of a specific quantity of the renewable fuel with a party who blends the fuel into gasoline or distillate fuel to produce a transportation fuel, heating oil, or jet fuel, provide all the following:

* * * * *

(xiii)(A) A renewable fuel producer seeking to generate D code 3 or D code 7 RINs, a foreign ethanol producer seeking to have its product sold as cellulosic biofuel after it is denatured, or a biointermediate producer seeking to have its biointermediate made into cellulosic biofuel, who intends to produce a single type of fuel using two or more feedstocks converted simultaneously, where at least one of the feedstocks does not have a minimum 75% average adjusted cellulosic content, and who uses only a thermochemical process to convert feedstock into renewable fuel, must provide all the following:

(1) Data showing the average adjusted cellulosic content of the feedstock(s) to be used to produce fuel or biointermediate, based on the average of at least three representative samples. Cellulosic content data must come from an analytical method certified by a voluntary consensus standards body or using a method that would produce reasonably accurate results as demonstrated through peer reviewed references provided to the third party engineer performing the engineering review at registration. Samples must be of representative feedstock from the primary feedstock supplier that will provide the renewable fuel or biointermediate producer with feedstock subsequent to registration.

(2) For renewable fuel and biointermediate producers who want to use a new feedstock(s) after initial registration, updates to their registration under paragraph (d) of this section indicating the average adjusted cellulosic content of the new feedstock.

(3) For renewable fuel producers already registered as of August 18, 2014, to produce a single type of fuel that qualifies for D code 3 or D code 7 RINs (or would do so after denaturing) using two or more feedstocks converted simultaneously using only a thermochemical process, the information specified in this paragraph (b)(1)(xiii)(A) shall be provided at the next required registration update under paragraph (d) of this section.

(B) A renewable fuel producer seeking to generate D code 3 or D code 7 RINs, a foreign ethanol producer seeking to have its product sold as cellulosic biofuel after it is denatured, or a biointermediate producer seeking to have its biointermediate made into cellulosic biofuel, who intends to produce a single type of fuel using two or more feedstocks converted simultaneously, where at least one of the feedstocks does not have a minimum 75% adjusted cellulosic content, and who uses a process other than a thermochemical process or a combination of processes to convert feedstock into renewable fuel or biointermediate, must provide all the following:

(I) The expected overall fuel or biointermediate yield, calculated as the total volume of fuel produced per batch (e.g., cellulosic biofuel plus all other fuel) divided by the total feedstock mass per batch on a dry weight basis (e.g., cellulosic feedstock plus all other feedstocks).

* * * * *

(5) For renewable fuel producers already registered as of August 18, 2014, to produce a single type of fuel that qualifies for D code 3 or D code 7 RINs (or would do so after denaturing) using two or more feedstocks converted simultaneously using a combination of processes or a process other than a thermochemical process, the information specified in this paragraph (b)(1)(xiii)(B) shall be provided at the next required registration update under paragraph (d) of this section.

* * * * *

(xv) For a producer of cellulosic biofuel made from crop residue, a foreign ethanol producer making ethanol from crop residue and seeking to have it sold after denaturing as cellulosic biofuel, or a biointermediate producer producing a biointermediate for use in the production of a cellulosic biofuel made from crop residue, provide all the following information:

* * * * *

(2) * * *

(i) * * *

(A) For a domestic renewable fuel production facility, a foreign ethanol production facility, or a biointermediate production facility, a professional engineer who is licensed by an appropriate state agency in the United States, with professional work experience in the chemical engineering field or related to renewable fuel production.

(B) For a foreign renewable fuel or foreign biointermediate production facility, an engineer who is a foreign equivalent to a professional engineer licensed in the United States with professional work experience in the chemical engineering field or related to renewable fuel production.

(ii) * * *

(A) The third-party shall not be operated by the renewable fuel producer, foreign ethanol producer, or biointermediate producer, or any subsidiary or employee of the renewable fuel producer foreign ethanol producer, or biointermediate producer.

(B) The third-party shall be free from any interest in the renewable fuel producer, foreign ethanol producer, or biointermediate producer's business.

(C) The renewable fuel producer, foreign ethanol producer, or biointermediate producer shall be free from any interest in the third-party's business.

* * * * *

(iv) The renewable fuel producer, foreign ethanol producer, or biointermediate producer must retain records of the review and verification, as required in §80.1454(b)(6) or (i)(4), as applicable.

* * * * *

(d) *Registration updates.* (1)(i)(A) Any renewable fuel producer or any foreign ethanol producer that makes changes to their facility that will allow them to produce renewable fuel or use a biointermediate that is not reflected in the producer's registration information on file with EPA must update their registration information and submit a copy of an updated independent

third-party engineering review on file with EPA at least 60 days prior to producing the new type of renewable fuel.

(B) Any biointermediate producer who makes changes to their biointermediate production facility that will allow them to produce a biointermediate for use in the production of a renewable fuel that is not reflected in the biointermediate producer's registration information on file with EPA must update their registration information and submit a copy of an updated independent third-party engineering review on file with EPA at least 60 days prior to producing the new biointermediate for use in the production of the renewable fuel.

(ii) The renewable fuel producer, foreign ethanol producer, or biointermediate producer may also submit an addendum to the independent third-party engineering review on file with EPA provided the addendum meets all the requirements in paragraph (b)(2) of this section and verifies for EPA the most up-to-date information at the producer's existing facility.

(2)(i) Any renewable fuel producer or any foreign ethanol producer that makes any other changes to a facility that will affect the producer's registration information but will not affect the renewable fuel category for which the producer is registered per paragraph (b) of this section must update their registration information 7 days prior to the change.

(ii)(A) Any biointermediate producer that makes any other changes to a biointermediate production facility that will affect the biointermediate producer's registration must update their registration information 7 days prior to the change.

(B)(I) Any biointermediate producer that intends to change the designated renewable fuel production facility under paragraph (b)(1)(ii)(G)(I) of this section for one of its biointermediate production facilities must update their registration information with EPA at least 30 days prior to transferring the biointermediate to the newly designated renewable fuel production facility.

(2) A biointermediate producer may only change the designated renewable fuel production facility under paragraph (b)(1)(ii)(G)(I) of this section for each biointermediate production facility one time per calendar year unless EPA, in its sole discretion, allows the biointermediate producer to change the designated renewable fuel production facility more frequently.

(3) All renewable fuel producers, foreign ethanol producers, and biointermediate producers must update registration information and submit an updated independent third-party engineering review according to the schedule in paragraph (d)(3)(i) or (ii) of this section, and include the information specified in paragraph (d)(3)(iii) or (iv) of this section, as applicable:

(i) For all renewable fuel producers and foreign ethanol producers registered in calendar year 2010, the updated registration information and independent third-party engineering review must be submitted to EPA by January 31, 2013, and by January 31 of every third calendar year thereafter; or

(ii) For all renewable fuel producers, foreign ethanol producers, and biointermediate producers registered in any calendar year after 2010, the updated registration information and independent third-party engineering review must be submitted to EPA by January 31 of every third calendar year after the first year of registration.

(iii) For all renewable fuel producers, in addition to conducting the engineering review and written report and verification required by paragraph (b)(2) of this section, the updated independent third-party engineering review must include a detailed review of the renewable fuel producer's calculations used to determine V_{RIN} of a representative sample of batches of each type of renewable fuel produced since the last registration. The representative sample must be selected in accordance with the sample size guidelines set forth at 40 CFR 1090.1805.

(iv) For biointermediate producers, in addition to conducting the engineering review and written report and verification required by paragraph (b)(2) of this section, the updated independent third-party engineering review must include a detailed review of the biointermediate producer's calculations used to determine the renewable biomass and cellulosic renewable biomass proportions, as required to be reported to EPA under §80.1451(i)(2), of a representative sample of batches of each type of biointermediate produced since the last registration. The representative sample must be selected in accordance with the sample size guidelines set forth at 40 CFR 1090.1805.

* * * * *

(g) *Independent third-party auditors.* * * * Registration information must be submitted at least 30 days prior to conducting audits of renewable fuel production or biointermediate production facilities. * * *

* * * * *

(5) *List of audited producers.* Name, address, and company and facility identification numbers of all renewable fuel production or biointermediate production facilities that the independent third-party auditor intends to audit under §80.1472.

(6) *Audited producer associations.* An affidavit, or electronic consent, from each renewable fuel producer, foreign renewable fuel producer, or biointermediate producer stating its intent to have the independent third-party auditor conduct a quality assurance audit of any of the renewable fuel producer's or foreign renewable fuel producer's facilities.

(7) *Independence affidavits.* An affidavit stating that an independent third-party auditor and its contractors and subcontractors are independent, as described in §80.1471(b), of any renewable fuel producer, foreign renewable fuel producer, or biointermediate producer.

* * * * *

(9) *Registration updates.* (i) Any independent third-party auditor who makes changes to its quality assurance plan(s) that will allow it to audit new renewable fuel production or biointermediate production facilities, as defined in §80.1401, that is not reflected in the independent third-party auditor's registration information on file with EPA must update its registration information and submit a copy of an updated QAP on file with EPA at least 60 days prior to auditing new renewable fuel production or biointermediate production facilities.

(ii) Any independent third-party auditor who makes any changes other than those specified in paragraphs (g)(9)(i), (iii), and (iv) of this section that will affect the third-party auditor's registration information must update its registration information 7 days prior to the change.

(iii) Independent third-party auditors must update their QAPs at least 60 days prior to verifying RINs generated or biointermediate produced by a renewable fuel or biointermediate production facility, respectively, for a pathway not covered in the independent third-party auditor's QAPs.

(iv) Independent third-party auditors must update their QAPs at least 60 days prior to verifying RINs generated or biointermediate produced by any renewable fuel or biointermediate production facility not identified in the independent third-party auditor's existing registration.

(10) * * *

(ii) The independent third-party auditor submits an affidavit affirming that he or she has only verified RINs and biointermediates using a QAP approved under §80.1469, notified all appropriate parties of all potentially invalid RINs as described in §80.1471(d), and fulfilled all of his or her RIN replacement obligations under §80.1474.

* * * * *

(11) * * *

(ii) * * * Communications should be sent to the EMTS support line
(*fuelsprogramsupport@epa.gov*). * * *

* * * * *

(h) * * *

(1) * * *

(i) Unless the party is a biointermediate producer, the party has reported no activity in EMTS for twenty-four consecutive months.

* * * * *

(2) * * *

(i) * * * The party will have 30 calendar days from the date of the notification to correct the deficiencies identified or explain why there is no need for corrective action.

* * * * *

18. Amend §80.1451 by:

a. Revising paragraphs (b)(1)(ii)(K) and (L), the first sentence of paragraph (b)(1)(ii)(R), (b)(1)(ii)(T), (b)(1)(ii)(U) introductory text, (g)(1)(i), (g)(1)(ii) introductory text, (g)(1)(ii)(A) through (C), (K), and (L), and (g)(2)(vii) and (viii);

b. Redesignating paragraph (g)(2)(x) as paragraph (g)(2)(xi) and adding new paragraph (g)(2)(x); and

c. Redesignating paragraphs (j) and (k) as paragraphs (k) and (l) and adding new paragraph (j).

The revisions and additions read as follows:

§80.1451 What are the reporting requirements under the RFS program?

* * * * *

(b) * * *

(1) * * *

(ii) * * *

(K) The types and quantities of feedstocks and biointermediates used.

(L) The process(es), feedstock(s), and biointermediate(s) used and proportion of renewable volume attributable to each process and feedstock.

* * * * *

(R) Producers or importers of renewable fuel made from separated municipal solid waste must report the amount of paper, cardboard, plastics, rubber, textiles, metals, and glass separated from municipal solid waste for recycling. * * *

* * * * *

(T) Producers or importers of any renewable fuel other than ethanol, biodiesel, renewable gasoline, renewable diesel that meets ASTM D975 Grade No. 1-D or No. 2-D specifications (incorporated by reference, see §80.1468), biogas or renewable electricity, must report, on a quarterly basis, all the following for each volume of fuel:

(1) Total volume of renewable fuel produced or imported, total volume of renewable fuel blended into gasoline and distillate fuel by the producer or importer, and the percentage of renewable fuel in each batch of finished fuel.

(2) If the producer or importer generates RINs under §80.1426(f)(17)(i)(B)(2), report the name, location, and contract information for each party that purchased the renewable fuel.

(U) Producers generating D code 3 or D code 7 RINs for fuel derived from feedstocks or biointermediates other than biogas (including through pathways listed in rows K, L, M, and N of Table 1 to §80.1426), and that was produced from two or more feedstocks converted simultaneously, at least one of which has less than 75% average adjusted cellulosic content, and using a combination of processes or a process other than a thermochemical process or a combination of processes shall report all of the following:

* * * * *

(g) * * *

(1)(i) For RINs verified beginning on September 16, 2014, RIN and biointermediate verification reports for each renewable fuel or biointermediate production facility audited by the independent third-party auditor shall be submitted according to the schedule specified in paragraph (f)(2) of this section.

(ii) The RIN and biointermediate verification reports shall include all the following information for each batch of renewable fuel produced or imported verified per §80.1469(c),

where “batch” means a discrete quantity of renewable fuel produced or imported and assigned a unique batch-RIN per §80.1426(d):

(A) The RIN generator or biointermediate producer's name.

(B) The RIN generator or biointermediate producer's EPA company registration number.

(C) The renewable fuel or biointermediate producer's EPA facility registration number.

* * * * *

(K) The volume and type of each feedstock and biointermediate used to produce the verified batch.

(L) Whether the feedstocks and biointermediates used to produce each verified batch met the definition of renewable biomass.

* * * * *

(2) * * *

(vii) A list of all renewable fuel and biointermediate facilities including the EPA's company and facility registration numbers audited under an approved quality assurance plan under §80.1469 along with the date the independent third-party auditor conducted the on-site visit and audit.

(viii) Mass and energy balances calculated for each renewable fuel and biointermediate production facility audited under an approved quality assurance plan under §80.1469.

* * * * *

(x) A list of all biointermediates that were identified as potentially improperly produced biointermediates under §80.1477(d).

* * * * *

(j) *Biointermediate producers.* For each biointermediate production facility, any biointermediate producer must submit quarterly reports for biointermediate batch production to EPA containing all of the information in this paragraph (j).

(1) Include all the following information for each batch of biointermediate produced:

(i) The biointermediate producer's name.

(ii) The biointermediate producer's EPA company registration number.

(iii) The biointermediate producer's EPA facility registration number.

(iv) The applicable compliance period.

(v) The production date.

(vi) The batch number.

(vii) The adjusted cellulosic content of each batch, as defined in §80.1401, and certification that the cellulosic content of each batch was derived from cellulose, hemicellulose, or lignin that was derived from renewable biomass, as defined in §80.1401.

(viii) The volume of each batch produced.

(ix) The types and quantities of feedstocks used.

(x) The renewable fuel type(s) each batch of biointermediate was designated to be used as a feedstock material for.

(xi) The EPA company registration number and EPA facility registration number for each renewable fuel producer or foreign renewable fuel producer that received title to each batch.

(xii) The percentage of each batch of biointermediate that met the definition of renewable feedstock and certification that this portion of the batch of biointermediate was derived from renewable biomass, as defined in §80.1401.

(xiii) The process(es) and feedstock(s) used and proportion of biointermediate volume attributable to each process and feedstock.

(xiv) The type of co-products produced with each batch.

(xv) The quantity of co-products produced in each quarter.

(xvi) Any additional information the Administrator may require.

(2) Quarterly reports under this paragraph of this section must be submitted according to the schedule in paragraph (f)(2) of this section.

* * * * *

19. Amend §80.1452 by redesignating paragraph (b)(16) as paragraph (b)(18) and adding new paragraphs (b)(16) and (17) to read as follows:

§80.1452 What are the requirements related to the EPA Moderated Transaction System (EMTS)?

* * * * *

(b) * * *

(16) The type and quantity of each biointermediate used for the batch, if applicable.

(17) The EPA facility registration number of each biointermediate production facility at which a biointermediate used for the batch was produced, if applicable.

* * * * *

20. Amend §80.1453 by adding paragraphs (a)(11)(v) and (f) to read as follows:

§80.1453 What are the product transfer document (PTD) requirements for the RFS program?

(a) * * *

(11) * * *

(v) For RINs that are generated from renewable fuel produced from a biointermediate, the PTD must include the following:

(A) The EPA-issued company and facility identification number of each biointermediate producer for which the RINs represent renewable fuel generated from biointermediates.

(B) The type(s) of biointermediate used to make the renewable fuel.

(C) The following statement: “These RINs were generated from renewable fuel produced from a biointermediate.”

* * * * *

(f) On each occasion when any party transfers title or custody of a biointermediate, the transferor must provide to the transferee documents that include all of the following information:

- (1) The name and address of the transferor and transferee.
- (2) The transferor's and transferee's EPA company registration and applicable facility registration numbers.
- (3) The volume of biointermediate that is being transferred.
- (4) The date of the transfer.
- (5) The location of the biointermediate at the time of the transfer.
- (6) The renewable fuel type the biointermediate was designated to be used as a feedstock material for by the biointermediate producer under §80.1476(i).
- (7) The composition of the biointermediate being transferred, including:
 - (i) The type and quantity of each feedstock that was used to make the biointermediate.
 - (ii) The percentage of each feedstock that is renewable biomass, rounded to two decimal places.
 - (iii) For a biointermediate that contains both renewable and non-renewable feedstocks:
 - (A) The percentage of each feedstock that is not renewable biomass, rounded to two decimal places.
 - (B) The feedstock energy from the renewable biomass used to make the biointermediate, in Btu.

(C) The feedstock energy from the non-renewable biomass used to make the biointermediate, in Btu.

(D) The total percentage of the biointermediate that may generate RINs, rounded to two decimal places.

(E) The total percentage of the biointermediate that may not generate RINs, rounded to two decimal places.

(iv) For a biointermediate that contains cellulosic material:

(A) The percentage of each feedstock in paragraph (f)(7)(ii) of this section that is cellulosic, rounded to two decimal places.

(B) The percentage of each feedstock in paragraph (f)(7)(ii) of this section that is non-cellulosic, rounded to two decimal places, if applicable.

(C) The total percentage of the biointermediate that may generate cellulosic RINs, rounded to two decimal places.

(D) For separated municipal solid waste, the cellulosic portion of the biointermediate is equivalent to the biogenic portion.

(E) For separated food waste, the non-cellulosic percentage is assumed to be zero percent unless it is demonstrated to be partially cellulosic.

(F) For separated yard waste, 100% of separated yard waste is deemed to be cellulosic.

(G) The following statement: “I certify that the cellulosic content of this feedstock was derived from cellulose, hemicellulose, or lignin that was derived from renewable biomass.”

(8) Copies of records specified in §80.1454(i)(3), (5), and (6) for the volume being transferred, as applicable.

(9) The following statement designating the volume of biointermediate as feedstock for the production of a renewable fuel: “This volume is designated and intended for use as biointermediate in the production of renewable fuel as defined in 40 CFR 80.1401. Parties may not generate RINs on this feedstock material.”

21. Amend §80.1454 by:

- a. Redesignating paragraphs (b)(3)(vii) through (xii) as paragraphs (b)(3)(viii) through (xiii) and adding new paragraph (b)(3)(vii);
- b. Revising paragraphs (b)(6), the first sentence of paragraph (d)(4), (i), and (j) introductory text;
- c. Adding paragraph (k) heading;
- d. Revising paragraphs (l) introductory text and (l)(1);
- e. Redesignating paragraph (l)(3) as paragraph (l)(4) and adding new paragraph (l)(3);
- f. Revising the first sentence of paragraph (m) introductory text;
- g. Redesignating paragraph (m)(10) as paragraph (m)(11) and adding new paragraph (m)(10);
- h. Removing paragraphs (n), (o), (p), and (q);
- i. Redesignating paragraphs (s), (t), (u), and (v) as paragraphs (n), (o), (p), and (q);

- j. Revising newly redesignated paragraph (n) introductory text;
- k. Revising paragraph (r);
- l. Adding new paragraphs (s), (t), (u), and (v); and
- m. Removing paragraph (w).

The revisions and addition read as follows:

§80.1454 What are the recordkeeping requirements under the RFS program?

* * * * *

(b) * * *

(3) * * *

(vii) Type and quantity of biointermediates used.

* * * * *

(6) Copies of registration documents required under §80.1450, including information on fuels and products, feedstocks, biointermediates, facility production processes, process changes, and capacity, energy sources, and a copy of the independent third party engineering review report submitted to EPA per §80.1450(b)(2).

* * * * *

(d) * * *

(4) Domestic producers of renewable fuel or biointermediates made from any other type of renewable biomass must have documents from their feedstock supplier certifying that the feedstock qualifies as renewable biomass as defined in §80.1401, describing the feedstock. * * *

* * * * *

(i) *Requirements for biointermediate producers.* Any biointermediate producer producing a biointermediate must keep all of the following records in addition to those required under paragraphs (a) through (m) of this section:

(1) Product transfer documents consistent with §80.1453(e) and associated with the biointermediate producer's activities, if any, as transferor or transferee of biointermediates.

(2) Copies of all reports submitted to EPA under §80.1451(i).

(3) Records related to the production of biointermediates for each biointermediate production facility, including all of the following:

(i) Batch volume.

(ii) Batch number.

(iii) Type and quantity of co-products produced.

(iv) Type and quantity of feedstocks used.

(v) Type and quantity of fuel used for process heat.

(vi) Feedstock energy calculations per §80.1426(f)(4), as applicable.

(vii) Date of production.

(viii) Results of any laboratory analysis of batch chemical composition or physical properties.

(4) Copies of registration documents required under §80.1450, including information on products, feedstocks, facility production processes, process changes, and capacity, energy sources, and a copy of the independent third party engineering review submitted to EPA per §80.1450(b)(2)(i).

(5) Records demonstrating that feedstocks are renewable biomass, as required under paragraphs (d), (g), (h), and (j) of this section, as applicable.

(6) For any biointermediate made from *Arundo donax* or *Pennisetum purpureum* per §80.1426(f)(14), all applicable records described in paragraph (b)(7) of this section.

(7) Records, including contracts, related to the implementation of a QAP under §§80.1469 and 80.1477.

(j) *Additional requirements for producers that use separated yard waste, separate food waste, separated municipal solid waste, or biogenic waste oils/fats/greases.* A renewable fuel or biointermediate producer that produces fuel or biointermediate from separated yard waste, separated food waste, separated municipal solid waste, or biogenic waste oils/fats/greases must keep all the following additional records:

* * * * *

(k) *Additional requirements for producers of renewable fuel using biogas.* * *

*

(l) *Additional requirements for producers or importers of any renewable fuel other than ethanol, biodiesel, renewable gasoline, renewable diesel, biogas, or renewable electricity.* A

renewable fuel producer that generates RINs for any renewable fuel other than ethanol, biodiesel, renewable gasoline, renewable diesel that meets ASTM D975 Grade No. 1-D or No. 2-D specifications (incorporated by reference, see §80.1468), biogas or renewable electricity shall keep all of the following additional records:

(1) Documents demonstrating the total volume of renewable fuel produced, total volume of renewable fuel blended into gasoline and distillate fuel, and the percentage of renewable fuel in each batch of finished fuel.

* * * * *

(3) For each batch of renewable fuel that generated RINs under §80.1426(f)(17)(i)(B)(2), one or more affidavits from the party that blended or used the renewable fuel that includes all the following information:

(i) Quantity of renewable fuel received from the producer or importer.

(ii) Date the renewable fuel was received from producer.

(iii) A description of the fuel that the renewable fuel was blended into and the blend ratios for each batch, if applicable.

(iv) A description of the finished fuel, and a statement that the fuel meets all applicable standards and was sold for use as a transportation fuel, heating oil or jet fuel.

(v) Quantity of assigned RINs received with the renewable fuel, if applicable.

(vi) Quantity of assigned RINs that the end user separated from the renewable fuel, if applicable.

* * * * *

(m) *Requirements for independent third-party auditors.* * * *

(10) Copies of all reports required under §80.1464.

* * * * *

(n) *Additional requirements for producers of renewable fuel using crop residue.*

Producers of renewable fuel using crop residue must keep records of all of the following:

* * * * *

(r) *Transaction requirement.* Beginning July 1, 2010, all parties must keep transaction information sent to EMTS in addition to other records required under this section.

(1) For buy or sell transactions of separated RINs, parties must retain records substantiating the price reported to EPA under §80.1452.

(2) For buy or sell transactions of separated RINs on or after January 1, 2020, parties must retain records demonstrating the transaction mechanism (e.g., spot market or fulfilling a term contract).

(s) *Record retention requirement.* (1) The records required under paragraphs (a) through (d), (f) through (l), (n), and (r) of this section and under §80.1453 must be kept for five years from the date they were created, except that records related to transactions involving RINs must be kept for five years from the date of the RIN transaction.

(2) The records required under paragraph (e) of this section must be kept through calendar year 2022.

(t) *Record availability requirement.* On request by the EPA, the records required under this section and under §80.1453 must be made available to the Administrator or the

Administrator's authorized representative. For records that are electronically generated or maintained, the equipment or software necessary to read the records shall be made available; or, if requested by the EPA, electronic records shall be converted to paper documents.

(u) *Record transfer requirement.* The records required in paragraphs (b)(3) and (c)(1) of this section must be transferred with any renewable fuel sent to the importer of that renewable fuel by any non-RIN-generating foreign producer.

(v) *English language records.* Any document requested by the Administrator under this section must be submitted in English or must include an English translation.

22. Amend §80.1460 by revising paragraphs (b)(5) and (6) and adding paragraphs (b)(8) and (k) to read as follows:

§80.1460 What acts are prohibited under the RFS program?

* * * * *

(b) * * *

(5) Introduce into commerce any renewable fuel produced from a feedstock, biointermediate, or through a process that is not described in the person's registration information.

(6) Generate a RIN for fuel for which RINs have previously been generated unless the RINs were generated under §80.1426(c)(6).

* * * * *

(8) Generate a RIN for fuel that was produced from a biointermediate for which the fuel and biointermediate were not audited under an EPA-approved quality assurance plan.

* * * * *

(k) *Biointermediate-related violations*. No person may do any of the following:

(1) Introduce into commerce for use in the production of a renewable fuel any biointermediate produced from a feedstock or through a process that is not described in the person's registration information.

(2) Produce a renewable fuel at more than one facility unless the person uses a biointermediate as defined under §80.1401 or the renewable biomass is not substantially altered. Form changes of renewable biomass such as chopping, crushing, grinding, pelletizing, filtering, compacting/compression, centrifuging, degumming, dewatering/drying, melting, or the addition of water to produce a slurry do not constitute substantial alteration.

(3) Transfer a biointermediate from a biointermediate production facility to a facility other than the renewable fuel production facility specified in the biointermediate producer's registration under §80.1450(b)(1)(ii)(G)(I).

(4) Isolate or concentrate non-characteristic components of the feedstock to yield an intermediate product not contemplated by EPA in establishing an approved pathway that the biointermediate producer and the renewable fuel producer are using to convert renewable biomass to renewable fuel.

23. Amend §80.1461 by revising paragraphs (a)(1) and (2) and adding paragraph (e) to read as follows:

§80.1461 Who is liable for violations under the RFS program?

(a) * * *

(1) Any person who violates a prohibition under §80.1460(a) through (d) or (g) through (k) is liable for the violation of that prohibition.

(2) Any person who causes another person to violate a prohibition under §80.1460(a) through (d) or (g) through (k) is liable for a violation of §80.1460(e).

* * * * *

(e) *Biointermediate liability.* When a biointermediate contained in any storage tank at any facility owned, leased, operated, controlled, or supervised by any biointermediate producer, biointermediate importer, renewable fuel producer, or foreign ethanol producer is found in violation of a prohibition described in §80.1460(k)(1) and (3), the following persons shall be deemed in violation:

(1) Each biointermediate producer, biointermediate importer, renewable fuel producer, renewable fuel importer, or foreign ethanol producer who owns, leases, operates, controls, or supervises the facility where the violation is found.

(2) Each biointermediate producer, biointermediate importer, renewable fuel producer, renewable fuel importer, or foreign ethanol producer who manufactured, imported, sold, offered for sale, dispensed, offered for supply, stored, transported, or caused the transportation of any biointermediate that is in the storage tank containing the biointermediate found to be in violation.

(3) Each carrier who dispensed, supplied, stored, or transported any biointermediate that was in the storage tank containing the biointermediate found to be in violation, provided that EPA demonstrates, by reasonably specific showings using direct or circumstantial evidence, that the carrier caused the violation.

24. Amend §80.1463 by revising paragraph (d) to read as follows:

§80.1463 What penalties apply under the RFS program?

* * * * *

(d) Any person liable under §80.1461(a) for a violation of §80.1460(b)(1) through (4) or (6) through (8) is subject to a separate day of violation for each day that an invalid RIN remains available for an obligated party or exporter of renewable fuel to demonstrate compliance with the RFS program.

25. Amend §80.1464 by:

- a. Removing “§80.127” everywhere it appears and adding “40 CFR 1090.1805” in its place;
- b. Revising paragraph (a)(3)(ii);
- c. Adding paragraph (a)(7);
- d. Revising paragraph (b)(1)(v)(A);
- e. Adding paragraph (b)(1)(v)(C);
- f. Revising paragraphs (b)(3)(ii) and (b)(4)(i);
- g. Adding paragraphs (b)(4)(iii) and (b)(8);
- h. Revising paragraphs (c) introductory text and (c)(2)(ii);
- i. Adding paragraphs (c)(6) and (7) and (h); and
- j. Revising paragraphs (i)(1) heading, (i)(1)(i) and (iii), (i)(2) heading, and (i)(2)(i) and (ii).

The revisions and additions read as follows:

§80.1464 What are the attest engagement requirements under the RFS program?

* * * * *

(a) * * *

(3) * * *

(ii) Obtain the database, spreadsheet, or other documentation used to generate the information in the RIN activity reports; compare the RIN transaction samples reviewed under paragraph (a)(2) of this section with the corresponding entries in the database or spreadsheet and report as a finding any discrepancies; compute the total number of current-year and prior-year RINs owned at the start and end of each quarter, and for parties that reported RIN activity for RINs assigned to a volume of renewable fuel, the volume and type of renewable fuel owned at the end of each quarter, as represented in these documents; and state whether this information agrees with the party's reports to EPA.

* * * * *

(7) *Compliance reports.* Compare the list of compliance reports submitted to EPA during the compliance period to the reporting requirements for the entity in §80.1451. Report as a finding any reporting requirements that were not completed.

(b) * * *

(1) * * *

(v)(A) Obtain documentation, as required under §80.1451(b), (d), and (e), associated with feedstock and biointermediate purchases for a representative sample of feedstocks and

biointermediates separately, selected in accordance with the guidelines in 40 CFR 1090.1805, of renewable fuel batches produced or imported during the year being reviewed.

* * * * *

(C) Verify that biointermediates were properly identified in the reports, as applicable.

* * * * *

(3) * * *

(ii) Obtain the database, spreadsheet, or other documentation used to generate the information in the RIN activity reports; compare the RIN transaction samples reviewed under paragraph (b)(2) of this section with the corresponding entries in the database or spreadsheet and report as a finding any discrepancies; report the total number of each RIN generated during each quarter and compute and report the total number of current-year and prior-year RINs owned at the start and end of each quarter, and for parties that reported RIN activity for RINs assigned to a volume of renewable fuel, the volume of renewable fuel owned at the end of each quarter, as represented in these documents; and state whether this information agrees with the party's reports to EPA.

(4) * * *

(i) Obtain documentation of independent third-party engineering reviews required under §80.1450(b)(2). Such documentation must include the date of the last engineering review along with date of the actual site visit by the professional engineer.

* * * * *

(iii) Verify that independent third-party engineering reviews conducted under §80.1450(d)(3) occurred within the three-year cycle. Report as a finding if the engineering review was not updated as part of the three-year cycle under §80.1450(d)(3).

* * * * *

(8) *Compliance reports.* Compare the list of compliance reports submitted to EPA during the compliance period to the reporting requirements for the entity in §80.1451. Report as a finding any reporting requirements that were not completed.

(c) *Other parties owning RINs.* Except as specified in paragraph (c)(6) of this section, the following attest procedures must be completed for any party other than an obligated party or renewable fuel producer or importer that owns any RINs during a calendar year:

* * * * *

(2) * * *

(ii) Obtain the database, spreadsheet, or other documentation used to generate the information in the RIN activity reports; compare the RIN transaction samples reviewed under paragraph (c)(1) of this section with the corresponding entries in the database or spreadsheet and report as a finding any discrepancies; compute the total number of current-year and prior-year RINs owned at the start and end of each quarter, and for parties that reported RIN activity for RINs assigned to a volume of renewable fuel, the volume of renewable fuel owned at the end of each quarter, as represented in these documents; and state whether this information agrees with the party's reports to EPA.

* * * * *

(6) *Low-volume RIN owner exemption.* Any party who meets all the following criteria in a given compliance period is not required to submit an attest engagement for that compliance period:

(i) The party must be solely registered as a party owning RINs (i.e., a "RIN Owner Only") and must not also be registered in any other role under §80.1450 (e.g., the party must not also be an obligated party, exporter of renewable fuel, renewable fuel producer, RIN generating importer, etc.).

(ii) The party must have transacted (e.g., generated, bought, sold, separated, or retired) 10,000 or fewer RINs in the given compliance period.

(iii) The party has not exceeded the RIN holding threshold(s) specified in §80.1435.

(7) *Compliance reports.* Compare the list of compliance reports submitted to EPA during the compliance period to the reporting requirements for the entity in §80.1451. Report as a finding any reporting requirements that were not completed.

* * * * *

(h) *Biointermediate producers.* The following attest reports must be completed for any biointermediate producer that produces a biointermediate in a compliance year:

(1) *Biointermediate production reports.* (i) Obtain and read copies of the quarterly biointermediate production reports required under §80.1451(i); compare the reported information to the requirements under §80.1451(i); and report as a finding any missing or incomplete information in the reports.

(ii) Obtain any database, spreadsheet, or other documentation used to generate the information in the biointermediate production reports; compare the corresponding entries in the database or spreadsheet and report as a finding any discrepancies.

(iii) For a representative sample of biointermediate batches, selected in accordance with the guidelines in 40 CFR 1090.1805, obtain records required under §80.1454(i); compare these records to the corresponding batch entries in the reports procured in paragraph (h)(1)(i) of this section and report as a finding any discrepancies.

(iv) Obtain the list of designated renewable fuel production facilities under §80.1450(b)(1)(ii)(G)(I); compare the list of registered designated renewable fuel production facilities to those identified in the biointermediate production report; and report as a finding any discrepancies.

(v) Provide the list of renewable fuel producers receiving any transfer of biointermediate batches and calculate the total volume from the batches received.

(2) *Independent third-party engineering review.* (i) Obtain documentation of independent third-party engineering reviews required under §80.1450(b)(2).

(ii) Review and verify the written verification and records generated as part of the independent third-party engineering review.

(iii) Provide the date of the submission of the last engineering review along with the date of the actual site visit by the professional engineer. Report as a finding if the engineering review was not updated as part of the three-year cycle under §80.1450(d)(3).

(iv) Compare and provide the total volume of produced biointermediate during the compliance year as compared to the production capacity stated in the engineering review and

report as a finding if the volume of produced biointermediate is greater than the stated production capacity.

(3) *Product transfer documents.* (i) Obtain contracts, invoices, or other documentation for each batch in the representative sample under paragraph (h)(1)(iii) of this section and the corresponding copies of product transfer documents required under §80.1453; compare the product transfer documents with the contracts and invoices and report as a finding any discrepancies.

(ii) Verify that the product transfer documents obtained in paragraph (h)(3)(i) of this section contain the applicable information required under §80.1453 and report as a finding any product transfer document that does not contain the required information.

(iii) Verify the accuracy of the information contained in the product transfer documents reviewed pursuant to paragraph (h)(3)(ii) of this section with the records obtained and reviewed under paragraph (h)(1)(iii) of this section and report as a finding any exceptions.

(i) * * *

(1) *Comparing RIN and biointermediate verification reports with approved QAPs.* (i) Obtain and read copies of reports required under §80.1451(g)(1). Compare the list of compliance reports submitted to EPA during the compliance period to the reporting requirements for the entity in §80.1451. Report as a finding any reporting requirements that were not completed.

* * * * *

(iii) Confirm that the independent third-party auditor only verified RINs and biointermediates covered by approved QAPs under §80.1469. Identify as a finding any discrepancies.

(2) *Checking third-party auditor's RIN and biointermediate verification.* (i) Obtain and read copies of reports required under §80.1451(g)(2). Compare the list of compliance reports submitted to EPA during the compliance period to the reporting requirements for the entity in §80.1451. Report as a finding any reporting requirements that were not completed.

(ii) Obtain all notifications of potentially invalid RINs and potentially improperly produced biointermediate submitted to the EPA under §§80.1474(b)(3) and 80.1477(d)(2) respectively.

* * * * *

26. Revise §80.1468 to read as follows:

§80.1468 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved material is available for inspection at U.S. EPA, Air and Radiation Docket and Information Center, WJC West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460, (202) 566-1742, and is available from the sources listed in this section. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to www.archives.gov/federal-register/cfr/ibr-locations.html.

(b) ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428-2959, (877) 909-2786, or www.astm.org.

(1) ASTM D975-21, Standard Specification for Diesel Fuel, approved August 1, 2021 (“ASTM D975”); IBR approved for §§80.1401, 80.1426(f), 80.1450(b), 80.1451(b), and 80.1454(l).

(2) ASTM D1250-19e1, Standard Guide for the Use of the Joint API and ASTM Adjunct for Temperature and Pressure Volume Correction Factors for Generalized Crude Oils, Refined Products, and Lubricating Oils: API MPMS Chapter 11.1, approved May 1, 2019 (“ASTM D1250”); IBR approved for §80.1426(f).

(3) ASTM D4442-20, Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials, approved March 1, 2020 (“ASTM D4442”); IBR approved for §80.1426(f).

(4) ASTM D4444-13 (2018), Standard Test Method for Laboratory Standardization and Calibration of Hand-Held Moisture Meters, reapproved July 1, 2018 (“ASTM D4444”); IBR approved for §80.1426(f).

(5) ASTM D6751-20a, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, approved August 1, 2020 (“ASTM D6751”); IBR approved for §80.1401.

(6) ASTM D6866-21, Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis, approved January 15, 2021 (“ASTM D6866”); IBR approved for §§80.1426(f) and 80.1430(e).

(7) ASTM E711-87 (2004), Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, reapproved 2004 (“ASTM E711”); IBR approved for §80.1426(f).

(8) ASTM E870-82 (2019), Standard Test Methods for Analysis of Wood Fuels, reapproved April 1, 2019 (“ASTM E870”); IBR approved for §80.1426(f).

27. Amend §80.1469 by revising the introductory text and paragraphs (c)(1)(vi) and (vii), (c)(2)(i), (c)(3)(i), (c)(5), and (f)(1) and (2) to read as follows:

§80.1469 Requirements for Quality Assurance Plans.

This section specifies the requirements for Quality Assurance Plans (QAPs) for renewable fuels and biointermediates.

* * * *

(c) * * *

(1) * * *

(vi) Feedstock(s) and biointermediate(s) are consistent with production process and D code being used as permitted under Table 1 to §80.1426 or a petition approved through §80.1416, and is consistent with information recorded in EMTS.

(vii) Feedstock(s) and biointermediate(s) are not renewable fuel for which RINs were previously generated unless the RINs were generated under §80.1426(c)(6). For renewable fuels that have RINs generated under §80.1426(c)(6), verify that renewable fuels used as a feedstock meet all applicable requirements of this paragraph (c)(1).

* * * *

(2) * * *

(i) Production process is consistent with the renewable fuel producer or biointermediate producer's registration under §80.1450(b).

* * * *

(3) * * *

(i) If applicable, renewable fuel was designated for qualifying uses as transportation fuel, heating oil, or jet fuel in the covered location pursuant to §80.1453.

* * * * *

(5) *Representative sampling.* Independent third-party auditors may use a representative sample of batches of renewable fuel or biointermediate in accordance with the procedures described in 40 CFR 1090.1805 for all components of this paragraph (c) except for paragraphs (c)(1)(ii) and (iii), (c)(2)(ii), (c)(3)(vi), and (c)(4)(ii) and (iii) of this section. If a facility produces both a renewable fuel and a biointermediate, the independent third-party auditor must select separate representative samples for the renewable fuel and biointermediate.

* * * * *

(f) * * *

(1) A new QAP must be submitted to EPA according to paragraph (e) of this section and the independent third-party auditor must update their registration according to §80.1450(g)(9) whenever any of the following changes occur at a renewable fuel or biointermediate production facility audited by an independent third-party auditor and the auditor does not possess an appropriate pathway-specific QAP that encompasses the change:

(i) Change in feedstock or biointermediates.

(ii) Change in type of fuel or biointermediate produced.

(iii) Change in facility operations or equipment that may impact the capability of the QAP to verify that RINs are validly generated or biointermediates are properly produced.

(2) A QAP ceases to be valid as the basis for verifying RINs or a biointermediate under a new pathway until a new pathway-specific QAP, submitted to the EPA under this paragraph (f), is approved pursuant to paragraph (e) of this section.

28. Amend §80.1471 by:

- a. Revising paragraphs (b)(1), (4), (5), and (6) and (c);
- b. Adding paragraph (e)(5); and
- c. Revising paragraphs (f)(1) introductory text, (f)(1)(ii), and (g).

The revisions and addition read as follows:

§80.1471 Requirements for QAP auditors.

* * * * *

(b) * * *

(1) The independent third-party auditor and its contractors and subcontractors must not be owned or operated by the renewable fuel producer, foreign renewable fuel producer, or biointermediate producer or any subsidiary or employee of the renewable fuel producer, foreign ethanol producer, or biointermediate producer.

* * * * *

(4) The independent third-party auditor and its contractors and subcontractors must be free from any interest or the appearance of any interest in the renewable fuel producer, foreign renewable fuel producer, or biointermediate producer's business.

(5) The renewable fuel producer, foreign renewable fuel producer, or biointermediate producer must be free from any interest or the appearance of any interest in the third-party auditor's business and the businesses of third-party auditor's contractors and subcontractors.

(6) The independent third-party auditor and its contractors and subcontractors must not have performed an attest engagement under §80.1464 for the renewable fuel producer, foreign renewable fuel producer, or biointermediate producer in the same calendar year as a QAP audit conducted pursuant to §80.1472.

* * * * *

(c) Independent third-party auditors must maintain professional liability insurance, as defined in 31 CFR 50.4(t). Independent third-party auditors must use insurance providers that possess a financial strength rating in the top four categories from Standard & Poor's or Moody's (i.e., AAA, AA, A or BBB for Standard & Poor's and Aaa, Aa, A, or Baa for Moody's), or a comparable rating acceptable to EPA. Independent third-party auditors must disclose the level of professional liability insurance they possess when entering into contracts to provide RIN verification services.

* * * * *

(e) * * *

(5) The independent third-party auditor must not identify RINs generated for renewable fuel produced using a biointermediate as having been verified under a QAP unless the biointermediate used to produce the renewable fuel was verified under an approved QAP pursuant to §80.1477.

(f)(1) Except as specified in paragraph (f)(2) of this section, auditors may only verify RINs that have been generated after the audit required under §80.1472 has been completed.

Auditors may only verify biointermediates that were produced after the audit required under §80.1472 has been completed. Auditors must only verify RINs generated from renewable fuels produced from biointermediates after the audit required under §80.1472 has been completed for both the biointermediate production facility and the renewable fuel production facility.

* * * * *

(ii) Verification of RINs or biointermediates may continue for no more than 200 days following an on-site visit or 380 days after an on-site visit if a previously the EPA-approved remote monitoring system is in place at the renewable fuel production facility.

* * * * *

(g) The independent third-party auditor must permit any representative of the EPA to monitor at any time the implementation of QAPs and renewable fuel and biointermediate production facility audits.

* * * * *

29. Amend §80.1472 by revising paragraphs (a)(4), (b)(3)(i) introductory text, (b)(3)(ii)(B), and (b)(3)(iii) to read as follows:

§80.1472 Requirements for quality assurance audits.

(a) * * *

(4) Each audit shall include a review of documents generated by the renewable fuel producer or biointermediate producer.

(b) * * *

(3) * * *

(i) As applicable, the independent third-party auditor shall conduct an on-site visit at the renewable fuel production facility, foreign ethanol production facility, or biointermediate production facility:

* * * * *

(ii) * * *

(B) 380 days after the previous on-site visit if a previously approved (by EPA) remote monitoring system is in place at the renewable fuel production facility, foreign ethanol production facility, or biointermediate production facility, as applicable. The 380-day period shall start the day after the previous on-site visit ends.

(iii) An on-site visit shall include verification of all QAP elements that require inspection or evaluation of the physical attributes of the renewable fuel production facility, foreign ethanol production facility, or biointermediate production facility, as applicable.

* * * * *

§80.1473 [Amended]

30. Amend §80.1473 by, in the first sentence of paragraph (f), removing “*support@epamts-support.com*” and adding “*fuelsprogramsupport@epa.gov*” in its place.

§80.1474 [Amended]

31. Amend §80.1474 by, in paragraphs (b)(2) introductory text, (b)(3), (b)(4)(i)(C) introductory text, and (b)(4)(ii)(C) introductory text, removing “*support@epamts-support.com*” and adding “*fuelsprogramsupport@epa.gov*” in its place.

32. Amend §80.1475 by:

- a. In paragraph (a)(2), removing “§§80.125 through 80.127 and §80.130” and adding “40 CFR 1090.1800 through 1090.1850” in its place;
- b. Revising the first sentence of paragraph (d)(1) and paragraph (d)(3); and
- c. In paragraph (d)(4), removing “§80.127” and adding “40 CFR 1090.1805” in its place.

The revisions read as follows:

§80.1475 What are the additional attest engagement requirements for parties that redesignate certified NTDF as MVNRLM diesel fuel?

* * * * *

(d) * * *

(1) For each of the volumes listed in paragraphs (c)(1)(iii) through (vi) of this section, obtain a separate listing of all tenders from the refiner or importer for the reporting period. * * *

* * * * *

(3) Agree the volume totals on the listing to the tender volume total in the inventory reconciliation analysis obtained in paragraph (c) of this section.

* * * * *

33. Section 80.1476 is added to read as follows:

§80.1476 Requirements for biointermediate producers.

Biointermediate producers must comply with the following requirements:

(a) *Registration.* No later than 60 days prior to the transfer of any biointermediate to be used in the production of a renewable fuel for which RINs may be generated, biointermediate producers must register with EPA pursuant to the requirements of §80.1450(b).

(b) *Reporting.* Biointermediate producers must comply with the reporting requirements pursuant to §80.1451(i).

(c) *Recordkeeping.* Biointermediate producers must comply with the recordkeeping requirements pursuant to §80.1454(i).

(d) *PTDs.* Biointermediate producers must comply with the PTD requirements pursuant to §80.1453(e).

(e) *Quality Assurance Plans.* Prior to the transfer of any biointermediate to be used in the production of a renewable fuel for which RINs may be generated, biointermediate producers must have an approved quality assurance plan pursuant to §80.1477(b) and the independent third-party auditor must have conducted a site visit of the biointermediate production facility under §80.1472.

(f) *Attest engagements.* Biointermediate producers must comply with the annual attest engagement requirements pursuant to §80.1464(h).

(g) *Limitations on biointermediate transfers and production.* (1) A biointermediate producer must only transfer a biointermediate produced from a single biointermediate facility to a single renewable fuel production facility as designated under §80.1450(b)(1)(ii)(G)(I).

(2) A batch of biointermediate must be segregated from other batches of biointermediate (even if it is the same type of biointermediate) and other feedstocks from the point that the batch of biointermediate is produced to the point where the batch of biointermediate is received at the renewable fuel production facility designated under §80.1450(b)(1)(ii)(G)(I).

(3) Renewable fuel producers that receive biointermediate at a renewable fuel production facility may not be a biointermediate producer.

(4) A biointermediate must not be used to make another biointermediate.

(h) *Batch numbers and volumes.* (1) Each batch of biointermediate produced at a biointermediate production facility must be assigned a number (the “batch number”), consisting of the EPA-assigned company registration number, the EPA-assigned facility registration number, the last two digits of the year in which the batch was produced, and a unique number for the batch, beginning with the number one for the first batch produced each calendar year and each subsequent batch during the calendar year being assigned the next sequential number (e.g., 4321-54321-95-000001, 4321-54321-95-000002, etc.).

(2) The volume of each batch of biointermediate must be adjusted to a standard temperature of 60 °F.

(i) *Designation.* Each batch of biointermediate produced at a biointermediate production facility must be designated for use in the production of a renewable fuel in accordance with the biointermediate producer’s registration under §80.1450. The designation for the batch of biointermediate must be clearly indicated on PTDs for the biointermediate as described in §80.1453(e)(6).

34. Section 80.1477 is added to read as follows:

§80.1477 Requirements for QAPs for biointermediate producers.

(a) Independent third-party auditors that verify biointermediate production must meet the requirements of §80.1471(a) through (c) and (f) through (h), as applicable.

(b) QAPs approved by EPA to verify biointermediate production must meet the requirements in §80.1469(c) through (f), as applicable.

(c) Quality assurance audits, when performed, must be conducted in accordance with the requirements in §80.1472(a) and (b)(3).

(d)(1) If an independent third-party auditor identifies a potentially improperly produced biointermediate, the independent third-party auditor must notify EPA, the biointermediate producer, and the renewable fuel producer that may have been transferred the biointermediate within five business days of the identification, including an initial explanation of why the biointermediate may have been improperly produced.

(2) If RINs were generated from the potentially improperly produced biointermediate, the RIN generator must follow the applicable identification and treatment of PIRs as specified in §80.1474.

(e) For the generation of Q-RINs for renewable fuels that were produced from a biointermediate, the biointermediate must be verified under an approved QAP as described in paragraph (b) of this section and the RIN generating facility must be verified under an approved QAP as described in §80.1469.

35. Section 80.1478 is added to read as follows:

§80.1478 Requirements for foreign biointermediate producers and importers.

(a) *Foreign biointermediate producer.* For purposes of this subpart, a foreign biointermediate producer is a person located outside the United States, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (collectively referred to in this section as “the United States”) that has

been approved by EPA to produce biointermediate for use in the production of renewable fuel by a RIN-generating renewable fuel producer.

(b) *Foreign biointermediate producer requirements.* Any foreign biointermediate producer must meet all requirements that apply to biointermediate producers under this subpart as a condition of being approved as a foreign biointermediate producer under this subpart.

(c) *Foreign biointermediate producer commitments.* Any foreign biointermediate producer must commit to the following provisions as a condition of being approved as a foreign biointermediate producer under this subpart:

(1) Any EPA inspector or auditor must be given full, complete, and immediate access to conduct inspections and audits of the foreign biointermediate producer facility.

(i) Inspections and audits may be either announced in advance by EPA, or unannounced.

(ii) Access will be provided to any location where:

(A) Biointermediate is produced.

(B) Documents related to foreign biointermediate producer operations are kept.

(C) Biointermediate is stored or transported between the foreign biointermediate producer and the renewable fuel producer, including storage tanks, vessels, and pipelines.

(iii) EPA inspectors and auditors may be EPA employees or contractors to EPA.

(iv) Any documents requested that are related to matters covered by inspections and audits must be provided to an EPA inspector or auditor on request.

(v) Inspections and audits may include review and copying of any documents related to the following:

(A) The volume of biointermediate produced or delivered to renewable fuel production facilities.

(B) Transfers of title or custody to the biointermediate.

(C) Work performed and reports prepared by independent third parties and by independent auditors under the requirements of this section, including work papers.

(vi) Inspections and audits by EPA may include interviewing employees.

(vii) Any employee of the foreign biointermediate producer must be made available for interview by the EPA inspector or auditor, on request, within a reasonable time period.

(viii) English language translations of any documents must be provided to an EPA inspector or auditor, on request, within 10 business days as defined in 40 CFR 1090.80.

(ix) English language interpreters must be provided to accompany EPA inspectors and auditors, on request.

(2) An agent for service of process located in the District of Columbia must be named, and service on this agent constitutes service on the foreign biointermediate producer or any employee of the foreign biointermediate producer for any action by EPA or otherwise by the United States related to the requirements of this subpart.

(3) The forum for any civil or criminal enforcement action related to the provisions of this section for violations of the Clean Air Act or regulations in this title promulgated thereunder must be governed by the Clean Air Act, including the EPA administrative forum where allowed under the Clean Air Act.

(4) United States substantive and procedural laws apply to any civil or criminal enforcement action against the foreign biointermediate producer or any employee of the foreign biointermediate producer related to the provisions of this section.

(5) Applying to be an approved foreign biointermediate producer under this section, or producing or exporting biointermediate under such approval, and all other actions to comply with the requirements of this subpart relating to such approval constitute actions or activities covered by and within the meaning of the provisions of 28 U.S.C. 1605(a)(2), but solely with respect to actions instituted against the foreign biointermediate producer, its agents and employees in any court or other tribunal in the United States for conduct that violates the requirements applicable to the foreign biointermediate producer under this subpart, including conduct that violates the False Statements Accountability Act of 1996 (18 U.S.C. 1001) and section 113(c)(2) of the Clean Air Act (42 U.S.C. 7413).

(6) The foreign biointermediate producer, or its agents or employees, will not seek to detain or to impose civil or criminal remedies against EPA inspectors or auditors for actions performed within the scope of EPA employment or contract related to the provisions of this section.

(7) The commitment required by this paragraph (c) must be signed by the owner or president of the foreign biointermediate producer company.

(8) In any case where the biointermediate produced at a foreign biointermediate production facility is stored or transported by another company between the production facility and the vessel that transports the biointermediate to the United States, the foreign biointermediate producer must obtain from each such other company a commitment that meets the requirements specified in paragraphs (c)(1) through (7) of this section, and these

commitments must be included in the foreign biointermediate producer's application to be an approved foreign biointermediate producer under this subpart.

(d) *Sovereign immunity.* By submitting an application to be an approved foreign biointermediate producer under this subpart, or by producing and exporting biointermediate fuel to the United States under such approval, the foreign biointermediate producer, and its agents and employees, without exception, become subject to the full operation of the administrative and judicial enforcement powers and provisions of the United States without limitation based on sovereign immunity, with respect to actions instituted against the foreign biointermediate producer, its agents and employees in any court or other tribunal in the United States for conduct that violates the requirements applicable to the foreign biointermediate producer under this subpart, including conduct that violates the False Statements Accountability Act of 1996 (18 U.S.C. 1001) and section 113(c)(2) of the Clean Air Act (42 U.S.C. 7413).

(e) *English language reports.* Any document submitted to EPA by a foreign biointermediate producer must be in English or must include an English language translation.

(f) *Foreign biointermediate producer contractual relationship.* Any foreign biointermediate producer must establish a contractual relationship with the RIN-generating renewable fuel producer prior to the sale of a biointermediate. Any foreign biointermediate producer must retain contracts and documents memorializing the sale of biointermediates for five years from the date they were created and must deliver such records to the Administrator upon request.

(g) *Withdrawal or suspension of foreign biointermediate producer approval.* EPA may withdraw or suspend a foreign biointermediate producer's approval where any of the following occur:

(1) A foreign biointermediate producer fails to meet any requirement of this section.

(2) A foreign government fails to allow EPA inspections or audits as provided in paragraph (c)(1) of this section.

(3) A foreign biointermediate producer asserts a claim of, or a right to claim, sovereign immunity in an action to enforce the requirements in this subpart.

(h) *Additional requirements for applications, reports, and certificates.* Any application for approval as a foreign biointermediate producer, any report, certification, or other submission required under this section shall be:

(1) Submitted in accordance with procedures specified by the Administrator, including use of any forms that may be specified by the Administrator.

(2) Signed by the president or owner of the foreign biointermediate producer company, or by that person's immediate designee, and must contain the following declarations:

(i) "I hereby certify:

(A) That I have actual authority to sign on behalf of and to bind [NAME OF FOREIGN BIOINTERMEDIATE PRODUCER] with regard to all statements contained herein;

(B) That I am aware that the information contained herein is being Certified, or submitted to the United States Environmental Protection Agency, under the requirements of 40 CFR part 80, subpart M, and that the information is material for determining compliance under these regulations; and

(C) That I have read and understand the information being Certified or submitted, and this information is true, complete and correct to the best of my knowledge and belief after I have taken reasonable and appropriate steps to verify the accuracy thereof."

(ii) “I affirm that I have read and understand the provisions of 40 CFR part 80, subpart M, including 40 CFR 80.1478 apply to [NAME OF FOREIGN BIOINTERMEDIATE PRODUCER]. Pursuant to Clean Air Act section 113(c) and 18 U.S.C. 1001, the penalty for furnishing false, incomplete or misleading information in this certification or submission is a fine of up to \$10,000 U.S., and/or imprisonment for up to five years.”

(i) *Requirements for biointermediate importers.* Any biointermediate importer must meet all the following requirements:

(1) For each biointermediate batch, any biointermediate importer must have an independent third party do all the following:

(i) Determine the volume of biointermediate in the truck, railcar, vessel, or other shipping container.

(ii) Determine the name and EPA-assigned registration number of the foreign biointermediate producer that produced the biointermediate.

(iii) Determine the name and country of registration of the truck, railcar, vessel, or other shipping container used to transport the biointermediate to the United States.

(iv) Determine the date and time the truck, railcar, vessel, or other shipping container arrives at the United States port of entry.

(2) Any biointermediate importer must submit documentation of the information determined under paragraph (i)(1) of this section within 30 days following the date any truck, railcar, vessel, or other shipping container transporting biointermediate arrives at the United States port of entry to all the following:

(i) The foreign biointermediate producer.

(ii) The renewable fuel producer.

(3) The biointermediate importer and the independent third party must keep records of the audits and reports required under paragraphs (h)(1) and (2) of this section for five years from the date of creation.

PART 1090—REGULATION OF FUELS, FUEL ADDITIVES, AND REGULATED BLENDSTOCKS

36. The authority citation for part 1090 continues to read as follows:

Authority: 42 U.S.C. 7414, 7521, 7522-7525, 7541, 7542, 7543, 7545, 7547, 7550, and 7601.

Subpart A—General Provisions

37. Amend §1090.15 by:

- a. In paragraph (a), removing “(b) and (c)” and adding “(b) through (d)” in its place;
- b. In paragraph (c) introductory text, removing “section” and adding “part” in its place;
- c. Redesignating paragraph (d) as paragraph (e);
- d. Adding a new paragraph (d); and
- e. In newly redesignated paragraph (e), removing “(b) and (c)” and adding “(b) through (d)” in its place.

The addition reads as follows:

§1090.15 Confidential business information.

* * * * *

(d)(1) The following information contained in any enforcement action taken under this part is not entitled to confidential treatment under 40 CFR part 2, subpart B:

(i) The company's name.

(ii) The facility's name.

(iii) Any EPA-issued company and facility identification numbers.

(iv) The time or time period when any violation occurred.

(v) The quantity of fuel, fuel additive, or regulated blendstock affected by the violation.

(vi) Information relating to the exceedance of the fuel standard associated with the violation.

(vii) Information relating to the generation, transfer, or use of credits associated with the violation.

(viii) Any other information relevant to describing the violation.

(2) Enforcement actions within the scope of paragraph (d)(1) of this section include notices of violation, settlement agreements, administrative complaints, civil complaints, criminal information, and criminal indictments.

* * * * *